Memorandum

November 8, 2011 Date: (916) 654-4996 Telephone:

DOCKET

11-AFC-4

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Robert B. Weisenmiller, Ph.D., Chairman To:

James D. Boyd, Vice Chair

Karen Douglas, J.D., Commissioner Carla Peterman, Commissioner

From: California Energy Commission - Robert Oglesby **Executive Director** 1516 Ninth Street

Sacramento, CA 95814-5512

RIO MESA SOLAR ELECTRIC GENERATING FACILITY, STAFF'S DATA ADEQUACY Subject:

RECOMMENDATION (11-AFC-4)

On October 14, 2011, BrightSource Energy, Inc., submitted an Application for Certification (AFC) to construct and operate the Rio Mesa Solar Electric Generating Facility (Rio Mesa SEGF). The Rio Mesa SEGF site is located on the Palo Verde Mesa in Riverside County, California, approximately 13 miles southwest of the City of Blythe.

The proposed Rio Mesa SEGF (Project) would comprise three solar fields and a common area with shared facilities encompassing a total of approximately 5,750 acres. The southern solar field would be located on privately owned land on approximately 1,800 acres and the middle solar field would be located on mostly privately owned land on approximately 1,940 acres, with a small portion located on Federal land administered by the Bureau of Land Management (BLM). The third solar field, approximately 1,800 acres in size and located in the northern portion of the project, is mostly on BLM land, with a small portion on private lands. A separate Right of Way grant must be approved by the BLM for that portion of the project located on BLM land. Each solar plant would generate approximately 250 megawatts (MW), for a total net output of 750 MW and would use heliostats - elevated mirrors guided by a tracking system mounted on a pylon – to focus the sun's rays on a receiver located atop a 750-foot tall solar power tower near the center of each solar field. Each solar plant would utilize approximately 85,000 heliostats.

The shared facilities located in the common area located east of the plant sites would include administration, control, maintenance, and warehouse buildings; a heliostat assembly building, evaporation ponds, groundwater wells, a water treatment plant, construction laydown and parking areas, mobile equipment maintenance facilities and a natural gas tap and meter station.

The Rio Mesa SEGF will be interconnected to the Southern California Edison (SCE) grid through upgrades to SCE's 220 kilovolt (kV) line passing north of the site known as the Palo Verde-Devers Line. The upgrades will include construction by SCE of a new 220/500 kV substation adjacent to the Palo Verde-Devers line to be designated as the Colorado River Substation. This new substation and the 220 kV upgrades will be for the benefit of the Rio Mesa SEGF project and other interconnection customers in the region.

Staff has completed its data adequacy review of the AFC and has determined that it does not meet all the requirements listed in Title 20 California Code of Regulations,

section 1704, Appendix B (2007) for the 12-month process. Of the 23 technical disciplines reviewed, we believe the information contained in the AFC is deficient in five areas which are: Air Quality, Biological Resources, Cultural Resources, Water Resources, and Project Overview. Therefore, we recommend that the Energy Commission find the AFC incomplete and adopt the attached list of deficiencies.

Attached is a summary table and data adequacy worksheets for all technical disciplines. The worksheets for the aforementioned sections identify the additional information that we believe is necessary to complete the AFC in accordance with our regulations. At the Energy Commission's business meeting on November 16, 2011, I will recommend that the Energy Commission adopt the list of deficiencies and not accept the AFC as complete until the additional information specified in the data adequacy worksheets is supplied. If you have any questions, please call Pierre Martinez, staff's Project Manager, at (916) 651-3765.

Attachments: Attachment A, Overview of Staff's Data Adequacy Determination Attachment B, Staff's Data Adequacy Worksheets

Attachment A Overview of Energy Commission Staff's Data Adequacy Determination Rio Mesa Solar Electric Generating Facility 11-AFC-4

Technical Area	Attachment B Page No.	Adequate?
AIR QUALITY	1	NO
ALTERNATIVES	8	YES
BIOLOGICAL RESOURCES	11	NO
CULTURAL RESOURCES	23	NO
EFFICIENCY	33	YES
FACILITY DESIGN	35	YES
GEOLOGIC HAZARDS	38	YES
HAZARDOUS MATERIALS HANDLING	40	YES
LAND USE	43	YES
NOISE	47	YES
PALEONTOLOGICAL RESOURCES	47	YES
PROJECT OVERVIEW	54	NO
PUBLIC HEALTH	58	YES
RELIABILITY	61	YES
SOCIOECONOMICS	63	YES
SOILS	68	YES
TRAFFIC AND TRANSPORTATION	71	YES
TRANS LINE SAFETY & NUISANCE	75	YES
TRANSMISSION SYSTEM DESIGN	77	YES
VISUAL RESOURCES	80	YES
WASTE MANAGEMENT	85	YES
WATER RESOURCES	89	NO
WORKER SAFETY	98	YES

ATTACHMENT B

ENERGY COMMISSION STAFF'S Data Adequacy Worksheets

Rio Mesa Solar Electric Generating Facility 11-AFC-4

November 8, 2011

Adequacy Issue:	Adequate	Inadequate	Χ	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/26/2011
Technical Area:	Air Quality	_		Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Wenjun Qian
Project Manager:	Pierre Martinez			Docket:	2011-AFC-04	Technical Senior:	Gerry Bemis

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
	provide a discussion of the existing site conditions, the expected direct, indirect and	Section 5.1.3 (pages 5.1-19 to 5.1-29)	Yes	
Appendix B	cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse	Section 5.1.4 (pages 5.1-29 to 5.1-65)		
(g) (1)	environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the	Section 5.1.5 (pages 5.1-65 to 5.1-68)		
	effectiveness of the mitigation.	Section 5.1.7 (pages 5.1-75 to 5.1-76)		
		Section 5.1.3 (pages 5.1-19 to 5.1-29)	No	Please provide a copy of the letter of completeness from Mojave Desert Air Quality Management District.
		Section 5.1.5 (pages 5.1-65 to 5.1-68)		Wanagement District.
Appendix B (g) (8) (A)	The information necessary for the air pollution control district where the project is located to complete a Determination of Compliance.	Section 5.1.7 (pages 5.1-75 to 5.1-76)		
	complete a Betermination of Compliance.	Section 5.1.8 (pages 5.1-76 to 5.1-78)		
		Appendix 5.1		
		Enclosed modeling CD	\/	
Appendix B (g) (8) (B)	The heating value and chemical characteristics of the proposed fuels, the stack height and diameter, the exhaust velocity and temperature, the heat rate and the expected capacity factor	Tables 5.1-14 to 5.1-17 Appendix 5.1B (Tables 5.1B-1 to 5.1B-7, Tables 5.1B-8, 5.1B-11)	Yes	
	of the proposed facility.	Appendix 5.1D (Tables 5.1D-2 to 5.1D-4)		

Adequacy Issue:	Adequate	Inadequate	X	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/26/2011
Technical Area:	Air Quality			Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Wenjun Qian
Project Manager:	Pierre Martinez			Docket:	2011-AFC-04	Technical Senior:	Gerry Bemis

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	Information Required To Make Afc Conform With Regulations
Appendix B (g) (8) (C)	A description of the control technologies proposed to limit the emission of criteria pollutants.	Section 5.1.6.2 (pages 5.1-71 to 5.1-72) Appendix 5.1C	Yes	
Appendix B (g) (8) (D)	A description of the cooling system, the estimated cooling tower drift rate, the rate of water flow through the cooling tower, and the maximum concentrations of total dissolved solids.	Section 5.1.4.1 (page 5.1-34) Section 5.1.4.3 (page 5.1-41) Appendix 5.1B (Table 5.1B-9)	Yes	
Appendix B (g) (8) (E)	The emission rates of criteria pollutants and greenhouse gases (CO2, CH4, N2O, and SF6) from the stack, cooling towers, fuels and materials handling processes, delivery and storage systems, and from all on-site secondary emission sources.	Section 5.1.4.3 (pages 5.1-37 to 5.1-49) Section 5.1.5.3 (pages 5.1-66 to 5.1-68) Appendix 5.1B	Yes	
Appendix B (g) (8) (F)(i)	A description of typical operational modes, and start-up and shutdown modes for the proposed project, including the estimated frequency of occurrence and duration of each mode, and estimated emission rate for each criteria pollutant during each mode.	Section 5.1.4.2 (pages 5.1-34 to 5.1-37) Section 5.1.5.3 (pages 5.1-66 to 5.1-68) Appendix 5.1B	Yes	
Appendix B (g) (8) (F)(ii)	A description of the project's planned initial commissioning phase, which is the phase between the first firing of emissions sources and the commercial operations date, including the types and durations of equipment tests, criteria pollutant emissions, and monitoring techniques to be used during such tests.	Section 5.1.4.3 (page 5.1-41) Appendix 5.1B (Table 5.1B-17)	Yes	

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Project Manager:	Pierre Martinez			Docket:	2011-AFC-04	Technical Senior:	Gerry Bemis

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (G)	The ambient concentrations of all criteria pollutants for the previous three years as measured at the three Air Resources Board certified monitoring stations located closest to the project site, and an analysis of whether this data is representative of conditions at the project site. The applicant may substitute an explanation as to why information from one, two, or all stations is either not available or unnecessary.	Section 5.1.4.5 (pages 5.1-55 to 5.1-56)	Yes	
Appendix B (g) (8) (H)	One year of meteorological data collected from either the Federal Aviation Administration Class 1 station nearest to the project or from the project site, or meteorological data approved by the California Air Resources Board or the local air pollution control district.	Section 5.1.4.5 (pages 5.1-53 to 5.1-55)	Yes	
Appendix B (g) (8) (H) (i)	If the data is collected from the project site, the applicant shall demonstrate compliance with the requirements of the U.S. Environmental Protection Agency document entitled "On-Site Meteorological Program Guidance for Regulatory Modeling Applications" (EPA - 450/4-87-013 (August 1995)), which is incorporated by reference in its entirety.	Not Applicable	Yes	
Appendix B (g) (8) (H) (ii)	The data shall include quarterly wind tables and wind roses, ambient temperatures, relative humidity, stability and mixing heights, upper atmospheric air data, and an analysis of whether this data is representative of conditions at the project site.	Section 5.1.4.5 (pages 5.1-53 to 5.1-55) Appendix 5.1A Enclosed modeling CD	Yes	

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Project Manager:	Pierre Martinez			Docket:	2011-AFC-04	Technical Senior:	Gerry Bemis

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (I)	An evaluation of the project's direct and cumulative air quality impacts, consisting of the following:	Section 5.1.4.5 (pages 5.1-50 to 5.1-65) Sections 5.1.5 (pages 5.1-65 to 5.1-68) Section 5.1.7 (pages 5.1-75 to 5.1-76)	Yes	
Appendix B (g) (8) (I) (i)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct criteria pollutant impacts of project construction activities on ambient air quality conditions, including fugitive dust (PM ₁₀) emissions from grading, excavation and site disturbance, as well as the combustion emissions [nitrogen oxides (NO _x), sulfur dioxide (SO ₂), carbon monoxide (CO), and particulate matter less than 10 microns in diameter (PM ₁₀) and particulate matter less than 2.5 microns in diameter (PM2.5)] from construction-related equipment;	Section 5.1.4.5 (pages 5.1-57 to 5.1-58) Appendix 5.1F	Yes	
Appendix B (g) (8) (I) (ii)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct criteria pollutant (NO _x , SO ₂ , CO, PM ₁₀ , and PM _{2.5}) impacts on ambient air quality conditions of the project during typical (normal) operation, and during shutdown and startup modes of operation. Identify and include in the modeling of each operating mode the estimated maximum emissions rates and the assumed meteorological conditions;	Section 5.1.4.5 (pages 5.1-58 to 5.1-61) Appendix 5.1D	Yes	

Adequacy Issue:	Adequate	Inadequate	Χ	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/26/2011
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Project Manager:	Pierre Martinez			Docket:	2011-AFC-04	Technical Senior:	Gerry Bemis

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (I) (iii)	A protocol for a cumulative air quality modeling impacts analysis of the project's typical operating mode in combination with other stationary emissions sources within a six mile radius which have received construction permits but are not yet operational, or are in the permitting process. The cumulative inert pollutant impact analysis should assess whether estimated emissions concentrations will cause or contribute to a violation of any ambient air quality standard; and	Section 5.1.5 (pages 5.1-65 to 5.1-68) Appendix 5.1G	Yes	
Appendix B (g) (8) (I) (iv)	An air dispersion modeling analysis of the impacts of the initial commissioning phase emissions on state and federal ambient air quality standards for NO _X , SO ₂ , CO, PM ₁₀ , and PM _{2.5} .	Section 5.1.4.5 (page 5.1-63)	Yes	
Appendix B (g) (8) (J)	If an emission offset strategy is proposed to mitigate the project's impacts under subsection (g)(1), provide the following information:	Not applicable	Yes	
Appendix B (g) (8) (J) (i)	The quantity of offsets or emission reductions that are needed to satisfy air permitting requirements of local permitting agencies (such as the air district), state and federal oversight air agencies, and the California Energy Commission. Identify by criteria air pollutant, and if appropriate, greenhouse gas; and	Not applicable	Yes	
Appendix B (g) (8) (J) (ii)	Potential offset sources, including location, and quantity of emission reductions;	Not applicable	Yes	

Adequacy Issue:	Adequate	Inadequate	X	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/26/2011
Technical Area:	Air Quality			Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Wenjun Qian
Project Manager:	Pierre Martinez			Docket:	2011-AFC-04	Technical Senior:	Gerry Bemis

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (K)	A detailed description of the mitigation, if any, which an applicant may propose, for all projects impacts from criteria pollutants that currently exceed state or federal ambient air quality standards, but are not subject to offset requirements under the district's new source review rule.	Section 5.1.7 (pages 5.1-75 to 5.1-76)	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Table 5.1-1 (pages 5.1-3 to 5.1-5)	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 5.1-45 (pages 5.1-77 to 5.1-78)	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Table 5.1-45 (pages 5.1-77 to 5.1-78)	Yes	

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Project Manager:	Pierre Martinez			Docket:	2011-AFC-04	Technical Senior:	Gerry Bemis

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.1.9 (pages 5.1-78 to 5.1-79)	Yes	

DATA ADEQUACY WORKSHEET X Inadequate Revision No. 0 Date 10/25/2011 Adequacy Issue: Adequate Technical Area: Rio Mesa Solar Electric Generating Facility Technical Staff: Alternatives Project: Christina Snow Project Manager: Pierre Martinez Docket: 2011-AFC-04 Technical Senior: Amanda Stennick

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b)(1)(D)	A description of how the site and related facilities were selected and the consideration given to engineering constraints, site geology,	Section 6, Alternatives, describes existing site conditions and environmental impacts of the No Project Alternative in Section 6.2 (pp. 6-6 to 6-17). Section 6.3 analyzes three on-site alternatives in	Yes	None
	environmental impacts, water, waste and fuel constraints, electric transmission constraints, and any other factors considered by the applicant.	detail, including the Preferred Alternative (the Project). The potential environmental impacts of each are evaluated. Engineering and site geology constraints relative to each on-site alternative also are discussed (pp. 6-17 to 6-50). Major project features distinguishing the on-site alternatives are identified in Table 6.3-1 (p. 6-18).		
		Section 6.4 identifies the screening criteria used to evaluate the feasibility of nine off-site alternatives and the Project for solar power development (pp. 6-51 to 6-81). Table 6.4-1 compares the nine off-site alternatives and the Project with the screening criteria (pp. 6-54 to 6-56). Two of the off-site alternatives are carried forward for detailed analysis (pp. 6-66 to 6-82).		
		Technology alternatives are described and evaluated in Section 6.5 (pp. 6-82 to 6-85). Alternative access routes are described and evaluated in Section 6.6 (pp. 6-86 to 6-87).		
		Alternative water supply options are described and evaluated in Section 6.7 (pp. 6-87 to 6-90). Re-route alternatives for Bradshaw Trail are described and evaluated in Section 6.8 (pp. 6-90 to 6-91). Construction and Backup Power and Telecommunications are described in Sections 6.9 and 6.10, respectively (pp. 6-91).		

DATA ADEQUACY WORKSHEET X Inadequate Adequacy Issue: Adequate Revision No. 0 Date 10/25/2011 Technical Area: Rio Mesa Solar Electric Generating Facility Technical Staff: Project: Christina Snow Alternatives Pierre Martinez 2011-AFC-04 Technical Senior: Project Manager: Docket: Amanda Stennick

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (f)(1)	A discussion of the range of reasonable alternatives to the project, or to the location of the project, including the no project alternative, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and an evaluation of the comparative merits of the alternatives. In accordance with Public Resources Code section 25540.6(b), a discussion of the applicant's site selection criteria, any alternative sites considered for the project, and the reasons why the applicant chose the proposed site.	Section 6, Alternatives, evaluates a range of reasonable alternatives for compliance with most of the project objectives and ability to avoid or substantially lessen any of the significant effects of the Project (i.e., Preferred Alternative). The potential environmental impacts of each alternative are compared with the Preferred Alternative in the following sections: • The No Project Alternatives, including the Preferred Alternative (pp. 6-17 to 6-51); and • Two Off-Site Alternatives, including the Preferred Alternatives are identified in Table 6.3-1 (p. 6-18). The project features distinguishing the on-site alternatives are identified in Table 6.3-1 (p. 6-18). The project objectives are listed in Section 6.1.3 (pp. 6-3 to 6-5). The No Project Alternative will not meet any of the project objectives. On- and off-site alternatives are evaluated for compliance with the project objectives in the following tables: • Table 6.3-2, On-Site Alternative 1 – Preferred Alternative (pp. 6-20 to 6-33); • Table 6.3-3, On-Site Alternative 2 – 750-MW MWD-Only Alternative (pp. 6-33 to 6-41); • Table 6.3-4, On-Site Alternative 3 – 500-MW MWD-Only Alternative (pp. 6-42 to 6-44); • Table 6.4-2, Off-Site Alternative A – MWD Property East of the Project Site (pp. 6-68 to 6-74); and • Table 6.4-3, On-Site Alternative G – Sonoran West Site (pp. 6-74 to 6-83). Section 6.4 identifies the screening criteria used to evaluate the feasibility of nine off-site alternatives considered and the Project for solar power development (pp. 6-51 to 6-82). Table 6.4-1 compares the nine off-site alternatives and the Project with the screening criteria (pp. 6-54 to 6-57).	Yes	None

DATA ADEQUACY WORKSHEET X Inadequate Adequacy Issue: Adequate Revision No. 0 Date 10/25/2011 Technical Area: Alternatives Rio Mesa Solar Electric Generating Facility Technical Staff: Project: Christina Snow Project Manager: Pierre Martinez Docket: 2011-AFC-04 Technical Senior: Amanda Stennick

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (f)(2)	An evaluation of the comparative engineering, economic, and environmental merits of the alternatives discussed in subsection (f)(1).	Each alternative examined in detail is compared with the Project (i.e., Preferred Alternative). Environmental, economic, and engineering factors for each alternative are compared with the Preferred Alternative in the following sections: The No Project Alternative (pp. 6-5 to 6-17); Three On-Site Alternatives, including the Preferred Alternative (pp. 6-17 to 6-51); and Two Off-Site Alternatives (pp. 6-67 to 6-83). Major project features distinguishing the on-site	Yes	None
		alternatives, including engineering factors, are identified in Table 6.3-1 (p. 6-18). The economic viability of the on-site alternatives is not specifically addressed, but it is implied that the on-site alternatives carried forward for analysis are economically viable. Section 6.4 identifies the screening criteria used to evaluate the feasibility of nine off-site alternatives and the Project for solar power development, including engineering factors, economic viability, and		
		environmental sensitivity (pp. 6-51 to 6-82). Table 6.4-1 compares the nine off-site alternatives and the Project with the screening criteria (pp. 6-54 to 6-57). Two of the off-site alternatives are carried forward for detailed analysis based in part on their economic feasibility (pp. 6-68 to 6-83).		

Adequacy Issue:	Adequate	Inadequate	X	DAT	A ADEQUACY WORKSHEET	Revision No.	0	Date	11/08/2011
Technical Area:	Biological Res	sources		Project:	Rio Mesa Solar	Technical Sta	aff:	Heath	er Blair
Project Manager:	Pierre Martinez			Docket:	11-AFC-4	Technical Se	nior:	Rick Y	'ork

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR No	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse	Existing site conditions: Section 5.2.3 (pp 5.2-10-12) Section 5.2.5 (pp 5.2-44-60) Section 5.2.6 (pp 5.2-60-64)	Yes	
	environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Direct, indirect, and cumulative impacts: Section 5.2.7.2 (pp 5.2-65-84) Section 5.2.8 (pp 5.2-84-85)	Yes	
		Mitigation measures/ monitoring: Section 5.2.9 (pp 5.2-85-91)	Yes	
Appendix B (g) (13) (A)	A regional overview and discussion of terrestrial and aquatic biological resources, with particular attention to sensitive biological resources within ten (10) miles of the project. Include a map at a scale of 1:100,000 (or other suitable scale)	Regional overview: Section 5.2.3.1 (pp 5.2-11-12)	Yes	
	showing sensitive biological resource location(s) in relation to the project site and related facilities and any boundaries of a local Habitat Conservation Plan or similar open space land use plan or designation. Sensitive biological resources include the following:	Regional map: Figure 5.2-1	Yes	
Appendix B (g) (13) (A) (i)	species listed under state or federal Endangered Species Acts;	Section 5.2.5.5 (pp 5.2-50-51) Tables 5.2-2 and 4	Yes	

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Technical Area:	Biological Reso	ources		Project:	Rio Mesa Solar	Technical Staff:	Heather Blair
Project Manager:	Pierre Martinez			Docket:	11-AFC-4	Technical Senior:	Rick York

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR No	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (A) (ii)	resources defined in sections 1702(q) and (v) of Title 20 of the California Code of Regulations;	Section 5.2.3.1 (pp 5.2-11-12) Tables 5.2-2, 3, and 4	Yes	
Appendix B (g) (13) (A) (iii)	species identified as state Fully Protected;	Table 5.2-4	Yes	
Appendix B (g) (13) (A) (iv)	species covered by Migratory Bird Treaty Act;	Section 5.2.5.4 (p 5.2-50) Section 5.2.5.5 (pp 5.2-55-59) Appendix 5.2A (BTR App I)	Yes	
Appendix B (g) (13) (A) (v)	species and habitats identified by local, state, and federal agencies as needing protection, including but not limited to those identified by the California Natural Diversity Database, or where applicable, in Local Coastal Programs or in relevant decisions of the California Coastal Commission; and	Section 5.2.3.1 (pp 5.2-11-12) Section 5.2.5 (pp 5.2-44-60) Section 5.2.6 (pp 5.2-60-64)	Yes	
Appendix B (g) (13) (A) (vi)	fish and wildlife species that have commercial and/or recreational value.	N/A	Yes	
Appendix B (g) (13) (B)	Include a list of the species actually observed and those with a potential to occur within 1 mile of the project site and 1,000 feet from the outer edge of linear facility corridors. Maps or aerial photographs shall include the following:	Species actually observed: Appendix 5.2A (BTR App I, H) Species that have the potential to occur: Tables 5.2-2, 3, and 4	Yes	

Adequacy Issue:	Adequate Inade	quate X	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 11/08/2011	
Technical Area:	Biological Resource	es	Project:	Rio Mesa Solar	Technical Staff:	Heather Blair	
Project Manager:	Pierre Martinez		Docket:	11-AFC-4	Technical Senior:	Rick York	

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR No	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (B) (i)	Detailed maps at a scale of 1:6,000 or color aerial photographs taken at a recommended scale of 1 inch equals 500 feet (1:6,000) with a 30 percent overlap that show the proposed project site and related facilities, biological resources including, but not limited to, those found during project-related field surveys and in records from the California Natural Diversity Database, and the associated areas where biological surveys were conducted. Label the biological resources and survey areas as well as the project facilities;	Figures 5.2-2 through 5.2-6b	Yes	
Appendix B (g) (13) (B) (ii)	A depiction of the extent of the thermal plume at the surface of the water if cooling water is proposed to be discharged to a water source. Provide the location for the intake and discharge structures on an aerial photograph(s) or detailed maps. Water sources include, but are not limited to, waterways, lakes, impoundments, oceans, bays, rivers, and estuaries; and	N/A	N/A	
Appendix B (g) (13) (B) (iii)	An aerial photo or wetlands delineation maps at a scale of (1:2,400) showing any potential jurisdictional and non-jurisdictional wetlands delineated out to 250 feet from the edge of disturbance if wetlands occur within 250 feet of the project site and/or related facilities that would be included with the US Army Corps of Engineers Section 404 Permit application. For projects proposed to be located within the coastal zone, also provide aerial photographs or maps as described above that identify wetlands as defined by the Coastal Act.	Figures 5.2-5a and b (Federal) Figures 5.2-6a and b (State)	Yes	

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Technical Area:	Biological Res	ources		Project:	Rio Mesa Solar	Technical St	aff:	Heath	er Blair
Project Manager:	Pierre Martinez			Docket:	11-AFC-4	Technical Se	enior:	Rick Y	'ork

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR No	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS		
Appendix B (g) (13) (C)	A discussion of the biological resources at the proposed project site and related facilities. Related facilities include, but are not limited to,	Vegetation community types: Section 5.2.5.1 (pp. 5.2-44-48)	Yes			
	laydown and parking areas, gas and water supply pipelines, transmission lines, and roads. The discussion shall address the distribution of vegetation community types, denning or nesting sites, population concentrations, migration	Denning or nesting sites and breeding habitats: Sections 5.2.5.4 and 5.2.5.5 (pp 5.2-49-60)	Yes			
	corridors, breeding habitats, and other appropriate biological resources including the following:	Population concentrations: Figures 5.2-3, 4, 7	Yes			
	Tono ming.	Migration corridors: Section 5.2.3.1 (pp. 5.2-12)	Yes			
Appendix B (g) (13) (C) (i)	A list of all the species actually observed;	Appendix 5.2A (BTR App I, H)	Yes			
Appendix B (g) (13) (C) (ii)	A list of sensitive species and habitats with a potential to occur (as defined in (A) above); and	Tables 5.2-2, 3, and 4	Yes			

Revision No. 0 11/08/2011 Adequacy Issue: Adequate Inadequate Date Χ DATA ADEQUACY WORKSHEET Technical Area: Project: Technical Staff: Heather Blair Biological Resources Rio Mesa Solar Pierre Martinez Docket: 11-AFC-4 Project Manager: Technical Senior: Rick York

SITING INFORMATION REGULATIONS		Information AFC PAGE NUMBER AND SECTION NUMBER YES		INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS		
Appendix B (g) (13) (C) (iii)	If cooling water is taken directly from or discharged to a surface water feature source, include a description of the intake structure, screens, water volume, intake velocity hydraulic zone field of influence, and the thermal plume dispersion area as depicted in response to B(ii) above. Describe the thermal plume size and dispersion under high and low tides, and in response to local currents and seasonal changes. Provide a discussion of the aquatic habitats, biological resources, and critical life stages found in these affected waters. For repower projects that anticipate no change in cooling water flow, this information shall be provided in the form of the most recent federal Clean Water Act 316(a) and (b) studies of entrainment and impingement impacts that has been completed within the last five (5) years. For new projects or repower projects proposing to use once-through cooling and anticipating an increase in cooling water flow, provide a complete impingement and entrainment analysis per guidance in (D)(ii), below.	N/A	N/A			

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Technical Area:	Biological Re	sources		Project:	Rio Mesa Solar	Technical St	aff:	Heathe	er Blair
Project Manager:	Pierre Martinez			Docket:	11-AFC-4	Technical Se	nior:	Rick Y	ork

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR No	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (D)	A description and results of all field studies and seasonal surveys used to provide biological baseline information about the project site and	Survey methods: Section 5.2.4 (pp 5.2-12-44)	Yes	
	associated facilities. Include copies of the California Natural Diversity Database records and field survey forms completed by the applicant's biologist(s). Identify the date(s) the	Survey results: Section 5.2.5 (pp 5.2-44-60) Section 5.2.6 (pp 5.2-60-64)	Yes	
	surveys were completed, methods used to complete the surveys, and the name(s) and qualifications of the biologists conducting the	Names and survey dates: App 5.2A (BTR App B)	Yes	
	surveys. Include:	CNDDB records: App 5.2A (BTR App D)	Yes	
		Resumes: App 5.2A (BTR App C)	Yes	

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Adequacy Issue:	Adequate Inac	dequate	Χ	DAT	A ADEQUACY WORKSHEET	Revision No.	0	Date	11/08/2011
Technical Area:	Biological Resource	ces		Project:	Rio Mesa Solar	Technical St	aff:	Heath	ner Blair
Project Manager:	Pierre Martinez			Docket:	11-AFC-4	Technical Se	enior:	Rick \	York

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR No	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (D) (i)	Current biological resources surveys conducted using appropriate field survey protocols during the appropriate season(s). State and federal agencies with jurisdiction shall be consulted for field survey protocol guidance prior to surveys if a protocol exists;	Section 5.2.4 (pp 5.2-12 through 5.2-43)	No	Applicant states that surveys were conducted of only those portions of the project for which right of entry had been granted at the time of survey. Some portions of the project area (229 acres) remain unsurveyed; therefore, the current survey coverage is not inclusive of the entire project site and project linear facilities, as required. Applicant needs to complete biological resource surveys, so that they are inclusive of the project site and project linear facilities, and submit a supplemental biological resources technical report documenting the findings. It is understood that it may not yet be possible to conduct some surveys within the appropriate spring/summer survey window (e.g., desert tortoise, rare plants, breeding burrowing owl, spring avian point counts). For such surveys, please submit a plan detailing how and when the outstanding surveys will be conducted according to protocol in those areas that are currently unsurveyed. In the meantime, please conduct any surveys possible (e.g., wetland/waters delineation, winter avian point counts) once right of entry is granted and submit findings in a supplemental biological resources technical report.

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Technical Area:	Biological Resources		Project:	Rio Mesa Solar	Technical Staff:	Heather Blair
Project Manager:	Pierre Martinez		Docket:	11-AFC-4	Technical Senior:	Rick York

SITING INFORMATION REGULATIONS		Section Number		INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS		
Appendix B (g) (13) (D) (ii)	If cooling water is proposed to be taken directly from or discharged to a surface water feature source, seasonal aquatic resource studies and surveys shall be conducted. Aquatic resource survey data shall include, but is not limited to, fish trawls, ichthyoplankton and benthic sampling, and related temperature and water quality samples. For new projects or repower projects anticipating a change in cooling water flows, sampling protocols shall be provided to the Energy Commission staff for review and concurrence prior to the start of sampling. For repower projects not anticipating a change in cooling water flows, this information shall be provided in the form of the most recent federal Clean Water Act 316(b) impingement and entrainment impact study completed within five (5) years of the AFC filing date; and	N/A	N/A			
Appendix B (g) (13) (D) (iii)	If the project or any related facilities could impact a jurisdictional or non-jurisdictional wetland, provide completed Army Corps of Engineers wetland delineation forms and/or determination of wetland status pursuant to Coastal Act requirements, name(s) and qualifications of biologist(s) completing the	Qualifications: App 5.2A (BTR App C) Results: Section 5.2.6 (pp 5.2-60-64) Tables 5.2-8, 9, and 10	Yes Yes			
	delineation, the results of the delineation and a table showing wetland acreage amounts to be impacted.	Acreage Impacted: Table 5.2-14	Yes			
Appendix B (g) (13) (E)	Impacts discussion of the following:					

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Project Manager:	Pierre Martinez			Docket:	11-AFC-4	Technical Se	enior:	Rick \	′ork

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR No	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS			
Appendix B (g) (13) (E) (i)	all impacts (direct, indirect, and cumulative) to biological resources from project site preparation, construction activities, plant operation, maintenance, and closure.	Bio resource impacts: Section 5.2.7.2 (pp 5.2-65-84) Section 5.2.8 (pp 5.2-84-85)	No	Please provide a discussion of the following: impacts resulting from operation of the evaporation pond, including measures proposed to minimize its impacts to wildlife; impacts to groundwater-dependent vegetation resulting from groundwater withdrawal for power plant operations; impacts to hydrology and vegetation of downstream desert washes from upstream fill/diversion attributable to the project.			
	Discussion shall also address sensitive species habitat impacts from cooling tower drift and air emissions;	Air quality impacts:	No	Please provide a discussion of impacts to sensitive species and vegetation from air emissions (e.g., due to operation of auxiliary boilers).			
Appendix B (g) (13) (E) (ii)	facilities that propose to take water directly from, and/or discharge water to surface water features, daytime and nighttime impacts from the intake and discharge of water during operation, water velocity at the intake screen, the intake field of influence, impingement, entrainment, and thermal discharge. Provide a discussion of the extent of the thermal plume, effluent chemicals, oxygen saturation, intake pump operations, and the volume and rate of cooling water flow at the intake and discharge location; and	N/A	N/A				
Appendix B (g) (13) (E) (iii)	Methods to control biofouling and chemical concentrations, and temperatures that are currently being discharged or will be discharged to receiving waters.	N/A	N/A				
Appendix B (g) (13) (F)	A discussion of all feasible mitigation measures including, but not limited to the following:						

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Technical Area:	Biological Re	sources		Project:	Rio Mesa Solar	Technical Staff:	Heather Blair
Project Manager:	Pierre Martinez			Docket:	11-AFC-4	Technical Senior:	Rick York

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR No	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (F) (i)	All measures proposed to avoid and/or reduce adverse impacts to biological resources;	Section 5.2.9 (pp 5.2-87-91)	Yes	
Appendix B (g) (13) (F) (ii)	All off-site habitat mitigation and habitat improvement or compensation, and an identification of contacts for compensation habitat and management;	Mitigation measures: Section 5.2.9. (pp 5.2-88 and 90; BIO-5 and BIO-12)	Yes	
	G ,	Contacts:	No	Please identify those contacts the Applicant has been working with to identify and secure off-site habitat compensation and include any pertinent records of correspondence.
Appendix B (g) (13) (F) (iii)	Design features to better disperse or eliminate a thermal discharge;	N/A	N/A	
Appendix B (g) (13) (F) (iv)	All measures proposed to avoid or minimize adverse impacts of cooling water intake. This shall include a Best Technology Available (BTA) discussion. If BTA is not being proposed, the rationale for not selecting BTA must be provided; and	N/A	N/A	
Appendix B (g) (13) (F) (v)	Educational programs to enhance employee awareness during construction and operation to protect biological resources.	Section 5.2.9 (pp 5.2-86; BIO-2)	Yes	
Appendix B (g) (13) (G)	A discussion of compliance and monitoring programs to ensure the effectiveness of impact avoidance and mitigation measures incorporated into the project.	Section 5.2.9 (pp 5.2-86-87; BIO-3)	Yes	

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SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR No	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (H)	Submit copies of any preliminary correspondence between the project applicant and state and federal resource agencies regarding whether federal or state permits from other agencies such as the U. S. Fish and Wildlife Service, the National Marine Fisheries Service, the U.S. Army Corps of Engineers, the California Department of Fish and Game, and the Regional Water Quality Control Board will be required for the proposed project.	Appendix 5.2A (BTR App K)	No	Please submit copies of any correspondence between the applicant and USFWS (related to migratory birds, golden eagles, desert tortoise, habitat compensation, Section 7 consultation, etc.), CDFG (related to state-jurisdictional washes, incidental take, etc.), and USACE (related to wetlands and waters of the U.S.) as it pertains to federal permits that will be required for the proposed project, and state permits that would be required but for the Energy Commission's exclusive jurisdiction.
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.2.2 (pp 5.2-5-10) Table 5.2-1	Yes	•
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 5.2.10 (p 5.2-92) Table 5.2-15	Yes	

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Technical Area:	Biological Re	sources		Project:	Rio Mesa Solar	Technical Staff:	Heather Blair
Project Manager:	Pierre Martinez			Docket:	11-AFC-4	Technical Senior:	Rick York

SITING REGULATIONS	Information	INFORMATION AFC PAGE NUMBER AND SECTION NUMBER YES OR NO		INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Section 5.2.10 (p 5.2-92) Table 5.2-15	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Table 5.2-16	No	Please provide a schedule of when permits outside the authority of the Commission will be obtained (i.e., Biological Opinion and CWA Section 404 permit) and the actual or anticipated timing of any application submittals related to the acquisition of these permits.

10/31/2011 Adequacy Issue: Adequate Inadequate Revision No. 0 Date Χ DATA ADEQUACY WORKSHEET Project: Rio Mesa Solar Electric Generating Facility Technical Staff: S. Allred Technical Area: Cultural Resources Pierre Martinez 11-AFC-04 Project Manager: Docket: Technical Senior: S. Strattan

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and	Existing site conditions: Vol. I, Sec. 5.3.3, pp. 5.3- 13 to 5.3-105; and Confidential Cultural Resources Technical Report – Sec. 2, pp. 2-1 to 2-109.	Yes	
	any monitoring plans proposed to verify the effectiveness of the mitigation.	Impacts due to project: Vol. I, Sec. 5.3.4, pp. 5.3- 105 to 5.3 -108; and Confidential Cultural Resources Technical Report – Sec. 7, pp. 7-1 to 7-3.	Yes	
		Measures to mitigate known impacts: Vol. I, Sec. 5.3.6, pp. 5.3-108 to 5.3-112; and Confidential Cultural Resources Technical Report – Sec. 7.2, pp. 7-3 to 7-10.	Yes	
		Effectiveness of the proposed measures	Yes	
		Any monitoring plans proposed to verify the effectiveness of the mitigation	Yes	

Adequacy Issue: Adequate Inadequate Revision No. 0 Date 10/31/2011 DATA ADEQUACY WORKSHEET Technical Staff: S. Allred Technical Area: Rio Mesa Solar Electric Generating Facility Cultural Resources Project: Project Manager: Pierre Martinez Docket: 11-AFC-04 Technical Senior: S. Strattan

SITING REGULATIONS	Information	INFORMATION AFC PAGE NUMBER AND ADEQUATE SECTION NUMBER YES OR NO				
Appendix B (g) (2) (A)	A summary of the ethnology, prehistory, and history of the region with emphasis on the area within no more than a 5-mile radius of the project location.	Summary of the ethnology, prehistory, and history: Vol. I, Sec. 5.3, pp.5.3-45 to 5.3-46; and Confidential Cultural Resources Technical Report – Sec. 2.5 – 2.8, pp. 2-48 to 2-49.	No	The synthesis of the regional prehistory and history of the Colorado Desert as a whole is sufficient as a broad introduction to the archaeology of the project area, but is insufficient as a useful context to facilitate in the interpretation of the survey results. Using the Colorado Desert prehistory and history as a springboard, and using the cultural resources technical reports and site forms that were gathered for the appendices of the AFC, the applicant needs to develop a discussion of the prehistoric and historic-era archaeology within no more than a 5-mile radius of the project location. Explain what the archaeology looks like on the ground within that radius.		

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SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (2) (B)	The results of a literature search to identify cultural resources within an area not less than a 1-mile radius around the project site and not less than one-quarter (0.25) mile on each side of the linear facilities. Identify any cultural resources listed pursuant to ordinance by a city or county, or recognized by any local historical or archaeological society or museum. Literature searches to identify the above cultural resources must be completed by, or under the	Literature searches: Vol. I, Sec. 5.3.3.6, pp. 5.3-47 to 5.3-98; and Confidential Cultural Resources Technical Report – Sec. 2.9, pp. 2-57 to 2-104 and pp. 108 to 109; and Appendix F, Part I.	Yes	
	direction of, individuals who meet the Secretary of the Interior's Professional Standards for the technical area addressed. Copies of California Department of Parks and Recreation (DPR) 523 forms (Title 14 CCR §4853) shall be provided for all cultural resources (ethnographic, architectural, historical, and archaeological) identified in the	Cultural resources listed under a city or county ordinance: Vol. I, Sec. 5.3.3.1, pp. 5.3-103 to 5.3- 105; and Confidential Cultural Resources Technical Report – Sec. 2.9.4, pp. 2-107 to 2-108.	Yes	
	literature search as being 45 years or older or of exceptional importance as defined in the National Register Bulletin Guidelines, (36CFR60.4(g)). A copy of the USGS 7.5' quadrangle map of the literature search area delineating the areas of all past surveys and noting the California Historical Resources Information System (CHRIS) identifying number shall be provided. Copies also shall be provided of all technical reports whose survey coverage	Cultural resources recognized by local societies: Vol. I, Sec. 5.3.3.1, pp. 5.3-104 to 5.3-105; and Confidential Cultural Resources Technical Report – Sec. 2.9.4, p. 2-10 to 2-107 to 2-108, and Appendix D.	Yes	
	is wholly or partly within .25 mile of the area surveyed for the project under Section (g)(2)(C), or which report on any archaeological excavations or architectural surveys within the literature search area.	Names/quals for lit searchers/directors: Confidential Cultural Resources Technical Report – Appendix A; and Appendix F, Part I.	Yes Yes	

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Project Manager:	Pierre Martinez		Docket:	11-AFC-04	Technical Senior:	S. Strattan

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
		resources: Confidential Cultural Resources Technical Report – Appendix F and Appendix G.		
		Map of lit search area with past surveys and CHRIS nos.: Confidential Cultural Resources Technical Report – Appendix E (Confidential Figures).	Yes	
		CHRIS reports: Confidential Cultural Resources Technical Report, Appendix F.	Yes	
Appendix B (g) (2) (C)	The results of new surveys or surveys less than 5 years old shall be provided if survey records of the area potentially affected by the project are more than five (5) years old. Surveys to identify new cultural resources must be completed by (or under the direction of) individuals who meet the Secretary of the Interior's Professional Standards	Names/quals for archaeo'l surveyors or directors: Confidential Cultural Resources Technical Report, Appendix A.	Yes	
	for the technical area addressed. New pedestrian archaeological surveys shall be conducted inclusive of the project site and project linear facility routes, extending to no less than 200' around the project site, substations and staging areas, and to no less than 50' to either side of the	Names/quals for historical architecture surveyors or directors: Confidential Cultural Resources Technical Report, Appendix A.	Yes	

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SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
	right-of-way of project linear facility routes. New historic architecture field surveys in rural areas shall be conducted inclusive of the project site and the project linear facility routes, extending no less than .5 mile out from the proposed plant site and from the routes of all above-ground linear facilities. New historic architecture field surveys in urban and suburban areas shall be conducted inclusive of the project site, extending no less than one parcel's distance from all proposed plant site boundaries. New historic architecture field reconnaissance ("windshield survey") in urban and suburban areas shall be conducted along the routes of all linear facilities to identify, inventory, and characterize structures and districts that appear to be older than 45 years or that are exceptionally significant, whatever their age.	Survey coverage, archaeology: Vol. I, Sec. 5.5.5.6, p. 5.3-47; and Confidential Cultural Resources Technical Report, Sec. 7, p. 7-1. Survey coverage, architecture: Vol. I, Sec. 5.3.3.8, pp. 5.3-102 to 5.3-103. Confidential Cultural Resources Technical Report, Sec. 5.2, p. 1327.	No	Applicant states that surveys were conducted of only those portions of the project for which right of entry had been granted at the time of survey. Some portions of the project area (229 acres) remain unsurveyed; therefore, the current survey coverage is not inclusive of the project site and project linear facilities, as required. Applicant needs to complete the cultural resources survey, so that it is inclusive of the project site and project linear facilities, and submit a supplemental cultural resources technical report documenting the findings.
	A technical report of the results of the new surveys, conforming to the Archaeological Resource Management Report format (CA Office of Historic Preservation Feb 1990), which is incorporated by reference, shall be separately provided and submitted (under confidential cover if archaeological site locations are included).	Tech report for new archaeological survey: Confidential Cultural Resources Technical Report for the Rio Mesa Solar Generating Facility, Riverside County, California.	Yes	
		Technical report for new historical architecture survey: Confidential Cultural Resources Technical Report for the Rio Mesa Solar Generating Facility, Riverside County, California.	Yes	

Adequacy Issue:	Adequate	Inadequate	Χ	DAT	A ADEQUACY WORKSHEET	Revision No.	0	Date	10/31/2011	
Technical Area:	Cultural Resou	irces		Project:	Rio Mesa Solar Electric Generating Facility	Technical Sta	aff:	S. Allr	ed	
Project Manager:	Pierre Martinez			Docket:	11-AFC-04	Technical Se	nior:	S. Stra	attan	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (2) (C) cont.	Information included in the technical report shall also be provided in the Application for Certification, except that confidential information (archaeological sites or areas of religious significance) shall be submitted under a request for confidentiality pursuant to Title 20, California Code of Regulations, § 2501 et seq. At a minimum, the technical report shall include the following:	Vol. I, Sec. 5.3, pp. 5.3-1 to 5.3-134.	Yes	
Appendix B (g) (2) (C) (i)	The summary from Appendix B (g)(2)(A) and the literature search results from Appendix B (g)(2)(B);	Summary: Vol. 1, Sec. 5.3.3.5, pp. 5.3-45 to 5.3-46; and Confidential Cultural Resources Technical Report, Sec. 2.7, pp. 2-48 to 2-49.	Yes	
		Literature search results: Vol. I, Sec. 5.3.3.6, pp. 5.3-47 to 5.3-98.	Yes	
Appendix B (g) (2) (C) (ii)	The survey procedures and methodology used to identify cultural resources and a discussion of the cultural resources identified by the survey;	Archaeological methodology: Vol. I, Sec. 5.3.3.7, pp. 5.3-99 to 5.3-101; and Confidential Cultural Resources Technical Report, Sec. 4.0, pp. 4-1 to 4-3.	Yes	
		Historical architecture methodology: Vol. 1, Sec. 5.3.3.8, pp. 5.3-102 to 5.3- 103; and Confidential Cultural Resources Technical Report, Sec. 4.3, pp. 4-3 to 4-4.	Yes	

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SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (2) (C) (iii)	Copies of all new and updated DPR 523(A) forms. If a cultural resource may be impacted by the project, also include the appropriate DPR 523 detail form for each such resource;	Archaeological forms: Confidential Cultural Resources Technical Report, Appendix F and Appendix G.	Yes	
		Architecture forms: Confidential Cultural Resources Technical Report, Appendix G, Vol. 4.	Yes	
Appendix B (g) (2) (C) (iv)	A map at a scale of 1:24,000 U.S. Geological Survey quadrangle depicting the locations of all previously known and newly identified cultural resources compiled through the research required by Appendix B (g)(2)(B) and Appendix B (g)(2)(C) (ii); and	Archaeology and architecture map: Confidential Cultural Resources Technical Report, Appendix E, Fig. 5-4.	Yes	
Appendix B (g) (2) (C) (v)	The names and qualifications of the cultural resources specialists who contributed to and were responsible for literature searches, surveys, and preparation of the technical report.	Names/quals for archaeologists: Confidential Cultural Resources Technical Report, Appendix A.	Yes	
		Names/quals for architectural historians: Confidential Cultural Resources Technical Report, Appendix A.	Yes	

Adequacy Issue:	Adequate Inadequate	Χ	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/31/2011
Technical Area:	Cultural Resources		Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	S. Allred
Project Manager:	Pierre Martinez		Docket:	11-AFC-04	Technical Senior:	S. Strattan

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (2) (D)	Provide a copy of your request to the Native American Heritage Commission (NAHC) for information on Native American sacred sites and lists of Native Americans interested in the project vicinity, and copies of any	NAHC request: Confidential Cultural Resources Technical Report, Appendix B.	Yes	
	correspondence received from the NAHC. Notify the Native Americans on the NAHC list about the project, including a project description and map. Provide a copy of all correspondence sent to Native American individuals and groups	NAHC response: Confidential Cultural Resources Technical Report, Appendix B.	Yes	
	listed by the NAHC and copies of all responses. Provide a written summary of any oral responses.	Letters sent to Native Americans: Confidential Cultural Resources Technical Report, Appendix B.	Yes	
		Letters received from Native Americans: Confidential Cultural Resources Technical Report, Appendix B.	Yes	
		Summary of oral responses from Native Americans: Confidential Cultural Resources Technical Report, Appendix B.	Yes	
Appendix B (g) (2) (E)	Include in the discussion of proposed mitigation measures required by subdivision (g)(1):	See Below	Yes	
Appendix B (g) (2) (E) (i)	A discussion of measures proposed to mitigate project impacts to known cultural resources;	Mitigation measures for known impacts: Vol. I, Sec. 5.3.6, pp. 5.3- 108 to 5.3-112; and Confidential Cultural Resources Technical Report, Sec. 7.	Yes	

10/31/2011 Adequacy Issue: Adequate Inadequate Revision No. 0 Date Χ DATA ADEQUACY WORKSHEET Project: Rio Mesa Solar Electric Generating Facility Technical Staff: S. Allred Technical Area: Cultural Resources Project Manager: Pierre Martinez 11-AFC-04 Docket: Technical Senior: S. Strattan

SITING INFORMATION REGULATIONS		AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFO WITH REGULATIONS		
Appendix B (g) (2) (E) (ii)	A set of contingency measures proposed to mitigate potential impacts to previously unknown cultural resources and any unanticipated impacts to known cultural resources; and	Contingency mitigation measures: Vol. I, Sec. 5.3.6, CUL-3 pp. 5.3-110 to 111; and CUL-5, p. 5.3- 112.	Yes			
Appendix B (g) (2) (E) (iii)	Educational programs to enhance employee awareness during construction and operation to protect cultural resources.	Worker education programs: Vol. I, Sec. 5.3.6, CUL-4, p. 5.3-111.	Yes			
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and	Tables identifying applicable LORS: Vol. I, Sec. 5.3.2, Table 5.3-1, pp. 5.3-3 to 5.3-5.	Yes			
	conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and	Explicitly referenced pages: Vol. I, Sec. 5.3.2, pp. 5.3 -3 to 5.3-5.	Yes			
	operation of the facility is discussed; and	Discussion of applicability of LORS: Vol. I, Sec. 5.3.2, pp. 5.3 -5 to 5.3-13.	Yes			
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Tables identifying agencies: Vol. I, Sec. 5.3.7, Table 5.3-6, pp. 5.3-113 to 5.3-114.	Yes			

Adequacy Issue:	Adequate	Inadequate	X	DAT	A ADEQUACY WORKSHEET	Revision No.	0	Date	10/31/2011	
Technical Area:	Cultural Res	ources		Project:	Rio Mesa Solar Electric Generating Facility	Technical Sta	ff:	S. Allr	ed	
Project Manager:	Pierre Martinez	<u>z</u>		Docket:	11-AFC-04	Technical Sen	nior:	S. Str	attan	

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Official within each agency who will serve as a contact person for the agency: Vol. I, Sec. 5.3.7, Table 5.3-6, pp. 5.3-113 to 5.3-114.	Yes*	*Please note that Energy Commission staff's phone number is listed incorrectly in the table. Correct phone number is: 916-654-5008.
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Schedule indicating when outside permits will be obtained: Vol. I, Sec. 5.3.8, p. 5.3-114.	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/28/2011	
Technical Area:	Efficiency	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Shahab Koshmashrab	
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Shahab Koshmashrab	_

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	§§ 1.1, 1.2, 1.3, 2.1.2, 2.1.4, 2.1.5, 2.3, 2.4.3;	Yes	
Appendix B (h) (4) (A)	Heat and mass balance diagrams for design conditions for each mode of operation.	Figures 2.4-1 through 2.4-4	Yes	
Appendix B (h) (4) (B)	Annual fuel consumption in BTUs for each mode of operation, including hot restarts and cold starts.	Table 5.1-19	Yes	
Appendix B (h) (4) (C)	Annual net electrical energy produced in MWh for each mode of operation including starts and shutdowns.	Table 2.1-1 § 2.1.4	Yes	
Appendix B (h) (4) (D)	Number of hours the plant will be operated in each design condition in each year.	Table 2.1-1	Yes	
Appendix B (h) (4) (E)	If the project will be a cogeneration facility, calculations showing compliance with applicable efficiency and operating standards.	N/A	N/A	
Appendix B (h) (4) (F)	A discussion of alternative generating technologies available for the project, including the projected efficiency of each, and an explanation why the chosen equipment was selected over these alternatives.	§ 6.5	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/28/2011
Technical Area:	Efficiency	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Shahab Koshmashrab
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Shahab Koshmashrab

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	N/A	N/A	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	N/A	N/A	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	N/A	N/A	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	N/A	N/A	

Adequacy Issue:	Adequate X Inadequate	DATA	ADEQUACY WORKSHEET F	Revision No. 0	Date 10/28/2011
Technical Area:	Facility Design	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Shahab Khoshmashrab
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (A)	A description of the site conditions and investigations or studies conducted to determine the site conditions used as the basis for developing design criteria. The descriptions shall include, but not be limited to, seismic and other geologic hazards, adverse conditions that could affect the project's foundation, adverse meteorological and climatic conditions, and flooding hazards, if applicable.	§§ 1.1, 1.2, 1.3, 2.1.2, 2.1.4, 2.1.5, 2.3, 2.4.1; Appendices 2A through 2D, 2G	Yes	
Appendix B (h) (1) (B)	A discussion of any measures proposed to improve adverse site conditions.	Appendices 2A through 2D, 2G	Yes	
Appendix B (h) (1) (C)	A description of the proposed foundation types, design criteria (including derivation), analytical techniques, assumptions, loading conditions, and loading combinations to be used in the design of facility structures and major mechanical and electrical equipment	Appendices 2A through 2D, 2G	Yes	
Appendix B (h) (1) (D)	For each of the following facilities and/or systems, provide a description including drawings, dimensions, surface-area requirements, typical operating data, and performance and design criteria for protection from impacts due to adverse site conditions:	_	_	
Appendix B (h) (1) (D) (i)	The power generation system;	§§ 1.1, 2.3, 2.3.4	Yes	
Appendix B (h) (1) (D) (ii)	The heat dissipation system;	§§ 1.2, 2.3.1, 2.3.3.5, 2.3.7	Yes	
Appendix B (h) (1) (D) (iii)	The cooling water supply system, and, where applicable, pre-plant treatment procedures;	§§ 2.1.5.1, 2.4.4.2, 5.15.3.3	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA	ADEQUACY WORKSHEET	Revision No. 0	Date 10/28/2011
Technical Area:	Facility Design	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Shahab Khoshmashrab
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (1) (D) (iv)	The atmospheric emission control system;	§ 2.3.10	Yes	
Appendix B (h) (1) (D) (v)	The waste disposal system and on-site disposal sites;	§ 2.3.8	Yes	
Appendix B (h) (1) (D) (vi)	The noise emission abatement system;	§ 5.7	Yes	
Appendix B (h) (1) (D) (vii)	The geothermal resource conveyance and reinjection lines (if applicable);	N/A	N/A	
Appendix B (h) (1) (D) (viii)	Switchyards/transformer systems; and	§ 2.3.4	Yes	
Appendix B (h) (1) (D) (ix)	Other significant facilities, structures, or system components proposed by the applicant.	N/A	N/A	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Appendices 2A through 2D, 2G	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA	ADEQUACY WORKSHEET	Revision No. 0	Date 10/28/2011
Technical Area:	Facility Design	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Shahab Khoshmashrab
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 5.4-2	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Table 5.4-2	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	§ 5.4.8	N/A	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/21/2011
Technical Area:	Geologic Hazards	Project:	Rio Mesa SEGF	Technical Staff:	Casey Weaver
Project Manager:	Pierre Martinez	Docket:	11-AFC-04	Technical Senior:	Paul Marshall

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Sections 5.4.3, 5.4.4, 5.4.5, 5.4.6	Yes	
Appendix B (g) (17) (A)	A summary of the geology, seismicity, and geologic resources of the project site and related facilities including linear facilities.	Section 5.4.3	Yes	
Appendix B (g) (17) (B)	A map at a scale of 1:24,000 and description of all recognized stratigraphic units, geologic structures, and geomorphic features within two (2) miles of the project site and along proposed facilities. Include an analysis of the likelihood of ground rupture, seismic shaking, mass wasting and slope stability, liquefaction, subsidence, tsunami runup, and expansion or collapse of soil structures at the plant site. Describe known geologic hazards along or crossing linear facilities.	Section 5.4.4 Figure 5.4-1	Yes	
Appendix B (g) (17) (C)	A map and description of geologic resources of recreational, commercial, or scientific value which may be affected by the project. Include a discussion of the techniques used to identify and evaluate these resources.	Sections 5.4.3 & 5.4.4 Figure 5.4-1	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/21/2011
Technical Area:	Geologic Hazards	Project:	Rio Mesa SEGF	Technical Staff:	Casey Weaver
Project Manager:	Pierre Martinez	Docket:	11-AFC-04	Technical Senior:	Paul Marshall

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table of matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.4.2 Table 5.4-1	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 5.4.7 Table 5.4-2	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Section 5.4.7 Table 5.4-2	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.4.8 Table 5.4-3	Yes	

Adequacy Issue: Adequate Inadequate Revision No. Date 10/27/2011 0 DATA ADEQUACY WORKSHEET Rio Mesa Solar Generating Facility Technical Staff: Rick Tyler Technical Area: Hazardous Materials Handling Project: Project Manager: Pierre Martinez Docket: 11-AFC-4 Technical Senior: Rick Tyler

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (e) (1)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Section 5.5.4.3	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 5.5	Yes	
Appendix B (g) (10) (A)	A list of all materials used or stored on-site which are hazardous or acutely hazardous, as defined in Title 22, California Code of Regulations, § 66261.20 et seq., and a discussion of the toxicity of each material.	Sections 5.5.4 Tables 5.5-2 through 5.5-5	Yes	
Appendix B (g) (10) (B)	A map at a scale of 1:24,000 depicting the location of schools, hospitals, day-care facilities, emergency response facilities and long-term health care facilities, within the area potentially affected by any release of hazardous materials.	None in project area Section 5.9.3d	Yes	
Appendix B (g) (10) (C)	A discussion of the storage and handling system for each hazardous material used or stored at the site.	Sections 5.5.4	Yes	
Appendix B (g) (10) (D)	The protocol that will be used in modeling potential consequences of accidental releases that could result in off site impacts. Identify the model(s) to be used, a description of all input assumptions, including meteorological conditions. The results of the modeling analysis can be submitted after the AFC is complete.	N.A. No regulated substances, no chemicals posing potential for off-site impact	Yes	

10/27/2011 Adequacy Issue: Revision No. 0 Adequate Inadequate Date X DATA ADEQUACY WORKSHEET Technical Staff: Rick Tyler Technical Area: Hazardous Materials Handling Project: Rio Mesa Solar Generating Facility Pierre Martinez Docket: 11-AFC-4 Project Manager: Technical Senior: Rick Tyler

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (10) (E)	A discussion of whether a risk management plan (Health and Safety Code § 25531 et seq.) will be required, and if so, the requirements that will likely be incorporated into the plan.	Section 5.9.2	Yes	
Appendix B (g) (10) (F)	A discussion of measures proposed to reduce the risk of any release of hazardous materials.	Section 5.5	Yes	
Appendix B (g) (10) (G)	A discussion of the fire and explosion risks associated with the project.	Section 5.5.4. 2	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.5.2 Table 5.5-1	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 5.5-7	Yes	

Adequacy Issue: Adequate Inadequate Revision No. Date 10/27/2011 0 DATA ADEQUACY WORKSHEET Rick Tyler Technical Area: Rio Mesa Solar Generating Facility Technical Staff: Hazardous Materials Handling Project: Project Manager: Pierre Martinez Docket: 11-AFC-4 Technical Senior: Rick Tyler

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Table 5.5-6	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Table 5.5-7	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/18/2011	
Technical Area:	Land Use	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Mark R. Hamblin	
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Amanda Stennick	

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Pg. 5.6-13 through 5.6-26, section 5.6.3. Pg. 5.6-29 through 5.6-30, section 5.6.4.1. Page 5.6-32 through 5.6-33, section 5.6.5 through 5.6.6.1.	Yes	
Appendix B (g) (3) (A)	A discussion of existing land uses and current zoning at the site, land uses and land use patterns within one mile of the proposed site and within one-quarter mile of any project-related linear facilities. Include:	Pg. 5.6-13 through 5.6-24, section 5.6.3.	Yes	
Appendix B (g) (3) (A) (i)	An identification of residential, commercial, industrial, recreational, scenic, agricultural, natural resource protection, natural resource extraction, educational, religious, cultural, and historic areas, and any other area of unique land uses;	Pg. 5.6-14 through 5.6-25, section 5.6.3.2 through 5.6.3.3.	Yes	
Appendix B (g) (3) (A) (ii)	A discussion of any recent or proposed zone changes and/or general plan amendments; noticed by an elected or appointed board, commission, or similar entity at the state or local level;	Pg. 5.6-12 through 5.13-13, section 5.6.2.3. Pg. 5.6-26 through 5.6-27, section 5.6.3.3. Pg. 5.6-28, section 5.6.4.1.	Yes	
Appendix B (g) (3) (A) (iii)	Identification of all discretionary reviews by public agencies initiated or completed within 18 months prior to filing the application for those changes or developments identified in subsection (g)(3)(A)(ii); and	Pg. 5.6-26, section 5.6.3.4.	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/18/2011	
Technical Area:	Land Use	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Mark R. Hamblin	
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Amanda Stennick	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (3) (A) (iv)	Legible maps of the areas identified in subsection (g)(3)(A) potentially affected by the project, on which existing land uses, jurisdictional boundaries, general plan designations, specific plan designations, and zoning have been clearly delineated.	Figure 2-1 Figure 2-2 Figure 5.6-1 Figure 5.6-2 Figure 5.6-4 Figure 5.6-5	Yes	
Appendix B (g) (3) (B)	A discussion of the compatibility of the proposed project with present and expected land uses, and conformity with any long-range land use plans adopted by any federal, state, regional, or local planning agencies. The discussion shall identify the need, if any, for land use decisions by another public agency or as part of the commission's decision that would be necessary to make the project conform to adopted federal, state, regional, or local coastal plans, land use plans, or zoning ordinances. Examples of land use decisions include: general plan amendments, zoning changes, lot line adjustments, parcel mergers, subdivision maps, Agricultural Land Conservation Act contracts cancellation, and Airport Land Use Plan consistency determinations.	Pg. 5.6-12 through 5.6-15, section 5.6.3.2. Pg. 5.6-26 through 5.6-27, section 5.6.3.3.	Yes	
Appendix B (g) (3) (C)	A discussion of the legal status of the parcel(s) on which the project is proposed. If the proposed site consists of more than one legal parcel, describe the method and timetable for merging or otherwise combining those parcels so that the proposed project, excluding linears and temporary laydown or staging area, will be located on a single legal parcel. The merger need not occur prior to a decision on the Application but must be completed prior to the start of construction.	Pg. 5.6-27, section 5.6.3.3.	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/18/2011	
Technical Area:	Land Use	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Mark R. Hamblin	
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Amanda Stennick	

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (3) (D)	A map at a scale of 1:24,000 and written description of agricultural land uses found within all areas affected by the proposed project. The description shall include:	Figure 5.6-3	Yes	
Appendix B (g) (3) (D) (i)	Crop types, irrigation systems, and any special cultivation practices;	Pg. 5.6-21 through 5.6-24, section 5.6.3.3, Table 5.6-7.	Yes	
Appendix B (g) (3) (D) (ii)	Whether farmland affected by the project is prime, of statewide importance, or unique as defined by the California Department of Conservation; and	Pg. 5.6-22, section 5.6.3.3, Table 5.6-6.	Yes	
Appendix B (g) (3) (D) (iii)	Direct, indirect, and cumulative effects on agricultural land uses. If the proposed site or related facilities are subject to an Agricultural Land Conservation contract, provide a written copy and a discussion of the status of the expiration or canceling of such contract.	Pg. 5.6-29 through 5.6-30, section 5.6.4.1.	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Table 5.6-1, pg. 5.6-2 through 5.6-3, section 5.6.2. Table 5.6-2, pg. 5.6-5, section 5.6.2.1. Table 5.6-3, pg. 5.6-11, section 5.6.2.3. Table 5.6-4, pg. 5.6-12, section 5.6.2.3.	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/18/2011	
Technical Area:	Land Use	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Mark R. Hamblin	
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Amanda Stennick	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Pg. 5.6-34, section 5.6.7, Table 5.6-9.	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Pg. 5.6-34, section 5.6.7, Table 5.6-9.	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Pg. 5.6-35, section 5.6.8, Table 5.6-10.	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/28/2011
Technical Area:	Noise	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Shahab Khoshmashrab
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	§§ 5.7.1, 5.7.2, 5.7.4, 5.7.5, 5.7.6	Yes	
Appendix B (g) (4) (A)	A land use map which identifies residences, hospitals, libraries, schools, places of worship, or other facilities where quiet is an important attribute of the environment within the area impacted by the proposed project. The area potentially impacted by the proposed project is that area where, during either construction or operation, there is a potential increase of 5 dBA or more, over existing background levels.	Figure 5.7-1	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/28/2011
Technical Area:	Noise	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Shahab Khoshmashrab
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (4) (B)	A description of the ambient noise levels at those sites identified under subsection (g)(4)(A) which the applicant believes provide a representative characterization of the ambient noise levels in the project vicinity, and a discussion of the general atmospheric conditions, including temperature, humidity, and the presence of wind and rain at the time of the measurements. The existing noise levels shall be determined by taking noise measurements for a minimum of 25 consecutive hours at a minimum of one site. Other sites may be monitored for a lesser duration at the applicant's discretion, preferably during the same 25-hour period. The results of the noise level measurements shall be reported as hourly averages in Leq (equivalent sound or noise level), Ldn (day-night sound or noise level) or CNEL (Community Noise Equivalent Level) in units of dBA. The L10, L50, and L90 values (noise levels exceeded 10 percent, 50 percent, and 90 percent of the time, respectively) shall also be reported in units of dBA.	§ 5.7.4.2	Yes	
Appendix B (g) (4) (C)	A description of the major noise sources of the project, including the range of noise levels and the tonal and frequency characteristics of the noise emitted.	§§ 5.7.5.1, 5.7.5.2	Yes	
Appendix B (g) (4) (D)	An estimate of the project noise levels, during both construction and operation, at residences, hospitals, libraries, schools, places of worship or other facilities where quiet is an important attribute of the environment, within the area impacted by the proposed project.	§§ 5.7.5.1, 5.7.5.2	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/28/2011
Technical Area:	Noise	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Shahab Khoshmashrab
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (4) (E)	An estimate of the project noise levels within the project site boundary during both construction and operation and the impact to the workers at the site due to the estimated noise levels.	§§ 5.7.5.1, 5.7.5.2	Yes	
Appendix B (g) (4) (F)	The audible noise from existing switchyards and overhead transmission lines that would be affected by the project and estimates of the future audible noise levels that would result from existing and proposed switchyards and transmission lines. Noise levels shall be calculated at the property boundary for switchyards and at the edge of the rights-of-way for transmission lines.	§ 5.7.5.2	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Table 5.7-1	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 5.7-15	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/28/2011
Technical Area:	Noise	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Shahab Khoshmashrab
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Shahab Khoshmashrab

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Table 5.17-15	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	§ 5.7.9	Yes	

Date: 10/24/2011 Adequacy Issue: Adequate Revision No.: Inadequate 0 DATA ADEQUACY WORKSHEET Technical Area: **Paleontological Resources** Project: Rio Mesa SEGF Technical Staff: Casey Weaver Project Manager: Pierre Martinez Docket: 11-AFC-04 Paul Marshall Technical Senior:

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B	provide a discussion of the existing site		Yes	
(g) (1)	conditions, the expected direct, indirect and cumulative impacts due to the construction,	Section 5.8.3,		
	operation and maintenance of the project, the	Section 5.8.4.3,		
	measures proposed to mitigate adverse environmental impacts of the project, the	Section 5.8.5,		
	effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 5.8.7.		
Appendix B	Identification of the physiographic province and a		Yes	
(g) (16) (A)	brief summary of the geologic setting, formations, and stratigraphy of the project area. The size of the	Section 5.8.3.1,		
	paleonotological study area may vary depending on	Section 5.8.3.2,		
	the depositional history of the region.	Section 5.8.4.3,		
		Section 5.8.5.		
Appendix B (g) (16) (B)	A discussion of the sensitivity of the project area described in subsection (g)(16)(A) and the presence and significance of any known paleontologic localities or other paleontologic resources within or adjacent to the project. Include a discussion of sensitivity for each geologic unit identified on the most recent geologic map at a scale of 1:24,000. Provide rationale as to why the sensitivity was assigned.	Section 5.8.4.2,	Yes	
		Sections 5.8.4.3,		
		Sections 5.8.5,		
		Confidential Appendix 5.8A, and Appendix 5.8B.		
Appendix B (g) (16) (C)	A summary of all local museums, literature searches and field surveys used to provide information about paleontologic resources in the project area described in subsection (g)(16)(A). Identify the dates of the surveys, methods used in completing the surveys, and the names and qualifications of the individuals conducting the surveys.	Section 5.8.4.3, Appendix 5.8B.	Yes	

Adequacy Issue:	Adequate	X	Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No.: 0	Date: 10/24/2011
Technical Area:	Paleontologi	cal Re	sources	Project:	Rio Mesa SEGF	Technical Staff:	Casey Weaver
Project Manager:	Pierre Martine	θZ		Docket:	11-AFC-04	Technical Senior:	Paul Marshall

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (16) (D)	Information on the specific location of known paleontologic resources, survey reports, locality records, and maps at a scale of 1:24,000, showing occurrences of fossil, finds if known, within a one-mile radius of the project and related facilities shall be included in a separate appendix to the Application and submitted to the Commission under a request for confidentiality, pursuant to Title 20, California Code of Regulations, s 2501 et seq.	Confidential Appendix 5.8A	Yes	
Appendix B (g) (16) (E)	A discussion of any educational programs proposed to enhance awareness of potential impacts to paleontological resources by employees, measures proposed for mitigation of impacts to known paleontologic resources, and a set of contingency measures for mitigation of potential impacts to currently unknown paleontologic resources.	Section 5.8.7.	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.8.2, Table 5.8-1.	Yes	
v (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 5.8.8, Table 5.8-2.	Yes	

Date: 10/24/2011 Adequacy Issue: Adequate Revision No.: Inadequate 0 DATA ADEQUACY WORKSHEET Technical Area: **Paleontological Resources** Project: Rio Mesa SEGF Technical Staff: Casey Weaver Project Manager: Pierre Martinez Docket: 11-AFC-04 Paul Marshall Technical Senior:

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Section 5.8.8, Table 5.8-2.	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.8.9.	Yes	

Adequacy Issue:	Adequate	Inadequate	X	DATA	A ADEQUACY WORKSHEET	Revision No.	0	Date	10/25/11	
Technical Area:	Project Overv	riew		Project:	Rio Mesa Solar Electric Generating Facility	Technical St	aff:	Pierre	Martinez	
Project Manager:	Pierre Martinez			Docket:	11-AFC-4	Technical Se	enior:	Chris	Davis	

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (a) (1) (A)	A general description of the proposed site and related facilities, including the location of the site or transmission routes, the type, size and capacity of the generating or transmission facilities, fuel characteristics, fuel supply routes and facilities, water supply routes and facilities, pollution control systems, and other general characteristics.	Section 2.1, pages 2-1 to 2-6; Sections 2.3 and 2.4, pages 2-7 to 2-33 Figures 2-1 to 2-8	No	Please provide a description of the length and location of the proposed gas lines from each power block to the proposed metering station as well as map showing the proposed locations of the gas lines.
Appendix B (a) (1) (B)	Identification of the location of the proposed site and related facilities by section, township, range, county and assessor's parcel numbers.	Section 2.1.2 Figures 2-1, 2-2; Appendix 1A	Yes	
Appendix B (a) (1) (C)	A description of and maps depicting the region, the vicinity, and the site and its immediate surroundings.	Sections 1.1; 1.3; 2.1.2 Figures 1.1-1; 1.2-1; 2-1	Yes	
Appendix B (a) (1) (D)	A full-page color photographic reproduction depicting the visual appearance of the site prior to construction, and a full-page color simulation or artist's rendering of the site and all project components at the site, after construction.	Figures 1.3-1 through 1.3-4	No	Provide an artist's rendering representative of one of the power blocks and the surrounding facilities/components.
Appendix B (a) (1) (E)	In an appendix to the application, a list of current assessor's parcel numbers and owners' names and addresses for all parcels within 500 feet of the proposed transmission line and other linear facilities, and within 1000 feet of the proposed powerplant and related facilities.	Appendix 1A	Yes	
Appendix B (a) (2)	Project Schedule: Proposed dates of initiation and completion of construction, initial start-up, and full-scale operation of the proposed facilities.	Section 2.3.15, pages 2-21 to 2-22	Yes	
Appendix B (a) (3) (A)	A list of all owners and operators of the site(s), the power plant facilities, and, if applicable, thermal host, the geothermal leasehold, the geothermal resource conveyance lines, and the geothermal re-injection system, and a description of their legal interest in these facilities.	Section 2.1.1, page 2-1	Yes	

10/25/11 Adequacy Issue: Adequate Inadequate Revision No. 0 Date X DATA ADEQUACY WORKSHEET Technical Area: Project: Technical Staff: Pierre Martinez **Project Overview** Rio Mesa Solar Electric Generating Facility Pierre Martinez Project Manager: Docket: 11-AFC-4 Technical Senior: Chris Davis

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (a) (3) (B)	A list of all owners and operators of the proposed electric transmission facilities.	Section 2.2.13, page 2- 20;Section 3.3, pages 3-5 to 3-8	Yes	
Appendix B (a) (3) (C)	A description of the legal relationship between the applicant and each of the persons or entities specified in subsections (a)(3)(A) and (B).	Section 2.1.1, page 2-1; Section 2.2.13;page 2-20 Section 3.3, pages 3-5 to 3-	Yes	
Appendix B (b) (1)	In a section entitled, "Generation Facility Description, Design, and Operation" provide the following information:	8 Section 2.3, pages 2-7 to 2- 22	N/A	
Appendix B (b) (1) (A)	Maps at a scale of 1:24,000 (1" = 2000'), (or appropriate map scale agreed to by staff) along with an identification of the dedicated leaseholds by section, township, range, county, and county assessor's parcel number, showing the proposed final locations and layout of the power plant and all related facilities;	Section 2.1.2, Page 20; Appendix 1A; Figure 2-1 and Figure 5.6-5	Yes	
Appendix B (b) (1) (B)	Scale plan and elevation drawings depicting the relative size and location of the power plant and all related facilities to establish the accuracy of the photo simulations required in Sections (a)(1)(D) and (g)(6)(F);		No	Provide scaled plans and elevation drawings (all four sides) of the power plant and all related facilities (e.g. power block area with associated buildings and facilities, common area with associated buildings and facilities, a heliostat, etc.).
Appendix B (b) (1) (C)	A detailed description of the design, construction and operation of the facilities, specifically including the power generation, cooling, water supply and treatment, waste handling and control, pollution control, fuel handling, and safety, emergency and auxiliary systems, and fuel types and fuel use scenarios; and	Section 2.3 pages 2-7 to 2-22, 5.16.1.4	Yes	

Adequacy Issue:	Adequate Inadequate	Χ	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/25/11	
Technical Area:	Project Overview		Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Pierre Martinez	
Project Manager:	Pierre Martinez		Docket:	11-AFC-4	Technical Senior:	Chris Davis	

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (1) (D)	A description of how the site and related facilities were selected and the consideration given to engineering constraints, site geology, environmental impacts, water, waste and fuel constraints, electric transmission constraints, and any other factors considered by the applicant.	Section 1.2.2, pages 1-4 to 1-5	Yes	
Appendix B (b) (2)	In a section entitled, "Transmission Lines Description, Design, and Operation" provide the following information:	Section 2.3.13, page 2-20 Section 3.0	N/A	
Appendix B (b) (2) (A)	Maps at a scale of 1:24,000 (or appropriate map scale agreed to by staff) of each proposed transmission line route, showing the settled areas, parks, recreational areas, scenic areas, and existing transmission lines within one mile of the proposed route(s);	Figures 2-1, 5.13-1A,and 5.6-2	Yes	
Appendix B (b) (2) (B)	A full-page color photographic reproduction depicting a representative above ground section of the transmission line route prior to construction and a full-page color photographic simulation of that section of the transmission line route after construction.	Figures 2-1, 2-2, 5.13-1a, 5.13-ab, and 5.13-14a through 5.13-19b	Yes	
Appendix B (b) (2) (C)	A detailed description of the design, construction, and operation of any electric transmission facilities, such as power lines, substations, switchyards, or other transmission equipment, which will be constructed or modified to transmit electrical power from the proposed power plant to the load centers to be served by the facility. Such description shall include the width of rights-of-way and the physical and electrical characteristics of electrical transmission facilities such as towers, conductors, and insulators.	Section 2.3.13, page 2-20; Section 3.0	Yes	

10/25/11 Adequacy Issue: Adequate Inadequate Revision No. 0 Date Χ DATA ADEQUACY WORKSHEET Technical Area: Project: Technical Staff: Pierre Martinez **Project Overview** Rio Mesa Solar Electric Generating Facility Pierre Martinez Project Manager: Docket: 11-AFC-4 Technical Senior: Chris Davis

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (2) (D)	A description of how the route and additional transmission facilities were selected, and the consideration given to engineering constraints, environmental impacts, resource conveyance constraints, and electric transmission constraints; and	Section 2.3.13, page 2-20; Section 3.0	Yes	
Appendix B (e) (1)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Section 2.5, pages 2-33 to 2-34	Yes	

Adequacy Issue: Adequate X Inadequate DATA ADEQUACY WORKSHEET Revision No. 0 Date 09/26/2011

Technical Area:Public HealthProject:Rio Mesa Solar FacilityTechnical Staff:Obed OdoemelamProject Manager:Pierre MartinezDocket:11-AFC-04Technical Senior:Gerry Bemis

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 2.0, pp.2-1 and 2-2, Section 5.9, pp. 5.9-1 and 5.9-5.	Yes	
Appendix B (g) (9) (A)	An assessment of the potential risk to human health from the project's hazardous air emissions using the Air Resources Board Hotspots Analysis and Reporting Program (HARP) (HSC §§44360-44366) or its successor and Approved Risk Assessment Health Values. These values should include the cancer potency values and noncancer reference exposure levels approved by the Office of Environmental Health Hazard Assessment (OEHHA Guidelines, Cal-EPA 2005).	Section 5.9, pp. 5.9-6 through 5.9-15. Appendix 5.1E.	Yes	
Appendix B (g) (9) (B)	A listing of the input data and output results, in both electronic and print formats, used to prepare the HARP health risk assessment.	Appendices 5.1D & 5.1E.	Yes	
Appendix B (g) (9) (C)	Identification of available health studies through the local public health department concerning the potentially affected population(s) within a six-mile radius of the proposed power plant site related to respiratory illnesses, cancers or related diseases.	Section 5.9, pp. 5.9-6 and 5.9-7.	Yes	
Appendix B (g) (9) (D)	A map showing sensitive receptors within the area exposed to the substances identified in subsection (g)(9)(A).	Section 5.9, pp. 5.9-6 and 5.9-7.	Yes	
Appendix B (g) (9) (E)	For purposes of this section, the following definitions apply:	Section 5.9, p. 5.9-9.	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA ADEQUACY WORKSHEET	Revision No. 0	Date 09/26/2011
Technical Area:	Public Health	Project: Rio Mesa Solar Facility	Technical Staff:	Obed Odoemelam
Project Manager:	Pierre Martinez	Docket: 11-AFC-04	Technical Senior:	Gerry Bemis

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (9) (E) (i)	A sensitive receptor refers to infants and children, the elderly, and the chronically ill, and any other member of the general population who is more susceptible to the effects of the exposure than the population at large;	Section 5.9, p. 5.9-8 through 5.9-11.	Yes	
Appendix B (g) (9) (E) (ii)	An acute exposure is one which occurs over a time period of less than or equal to one (1) hour; and	Section 5.9, pp. 5.9-8 through 5.9-11.	Yes	
Appendix B (g) (9) (E) (iii)	A chronic exposure is one which is greater than twelve (12) percent of a lifetime of seventy (70) years.	Section 5.8, pp 5.9-8 through 5.9-11.	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.9, pp. 5.9-1 and 5.9-2.	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 5.9, pp. 5.9-1 and 5.9-2.	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 09/26/2011
Technical Area:	Public Health	Project:	Rio Mesa Solar Facility	Technical Staff:	Obed Odoemelam
Project Manager:	Pierre Martinez	Docket:	11-AFC-04	Technical Senior:	Gerry Bemis

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Section 5.9, p. 5.9-16 and 5.9-18.	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.9, p. 5.9-16 and 5.9-18.	Yes	

Adequacy Issue: Adequate X Inadequate DATA ADEQUACY WORKSHEET Revision No. 0	
Technical Area: Reliability Project: Rio Mesa Solar Electric Generating Facility Technical Staff:	Shahab Khoshmashrab
Project Manager: Pierre Martinez Docket: 11-AFC-4 Technical Senior:	Shahab Koshmashrab

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	§§ 2.4.1.1, 2.4.2, 2.4.3, 2.4.4	Yes	
Appendix B (h) (3) (A)	A discussion of the sources and availability of the fuel or fuels to be used over the estimated service life of the facilities.	§§ 2.4.4.1, 4.1, 4.2	Yes	
Appendix B (h) (3) (B)	A discussion of the anticipated service life and degree of reliability expected to be achieved by the proposed facilities based on a consideration of:	-	Yes	
Appendix B (h) (3) (B) (i)	Expected overall availability factor, and annual and lifetime capacity factors;	§§ 2.3.16, 2.4.2.1	Yes	
Appendix B (h) (3) (B) (ii)	The demonstrated or anticipated feasibility of the technologies, systems, components, and measures proposed to be employed in the facilities, including the power generation system, the heat dissipation system, the water supply system, the reinjection system, the atmospheric emission control system, resource conveyance lines, and the waste disposal system;	§§ 2.4.1, 2.4.2, 2.4.3	Yes	
Appendix B (h) (3) (B) (iii)	Geologic and flood hazards, meteorologic conditions and climatic extremes, and cooling water availability;	§§ 2.1.5.1, 2.4.1.1, 5.4.4.1, 5.15	Yes	
Appendix B (h) (3) (B) (iv)	Special design features adopted by the applicant or resource supplier to ensure power plant reliability including equipment redundancy; and	§§ 2.4.2.2, 2.4.4.3	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/28/2011
Technical Area:	Reliability	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Shahab Khoshmashrab
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Shahab Koshmashrab

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (3) (B) (v)	For technologies not previously installed and operated in California, the expected power plant maturation period.	N/A	N/A	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	N/A	N/A	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	N/A	N/A	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	N/A	N/A	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	N/A	N/A	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/21/2011	
Technical Area:	Socioeconomics	Project:	RMSEGF	Technical Staff:	Lisa Worrall	
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Amanda Stennick	

SITING REGULATIONS	Information	AFC PAGE NUMBER AND Section Number	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Sect. 5.10.3, pgs. 5.10-8 to 5.10-40, Table 5.10-3 to 5.10-7, Table 5.10-8a to Table 5.10-8c, Table 5.10-9a to Table 5.10-9d, Table 5.10-10, Table 5.10-11a to Table 5.10-11h, Table 5.10-12 to Table 5.10-15, Sect. 5.10.4, pgs. 5.10-41 to 5.10-55, Table 5.10-16 to 5.10-21, Sect. 5.10.5, pgs. 5.10-57 to 5.10-60, Table 5.10-22 to Table 5.10-23, Sect 5.10.7, pg. 5.10-61.	Yes	
Appendix B (g) (7) (A)	A description of the socioeconomic circumstances of the vicinity and region affected by construction and operation of the project. Include:	Sect. 5.10.3, pgs. 5.10-8 to 5.10-40, Table 5.10-3 to 5.10-7, Table 5.10-8a to 5.10-8c, Table 5.10-9a to 5.10-9d, Table 5.10-10, Table 5.10-11a to 5.10-11h, Table 5.10-12 to Table 5.10-15.	Yes	
Appendix B (g) (7) (A) (i)	The economic characteristics, including the economic base, fiscal resources, and a list of the applicable local agencies with taxing powers and their most recent and projected revenues;	Sect. 5.10.3.5, pgs. 5.10-18 to 5.10-20, Tables 5.10-8a to 5.10-8c, Sect. 5.10.3.6, pg. 5.10-35, Table 5.10-12.	Yes	
Appendix B (g) (7) (A) (ii)	The social characteristics, including population and demographic and community trends;	Sect. 5.10-3.3, pgs. 5.10- 10 to 5.10-13, Table 5.10-3 and Table 5.10-4.	Yes	
Appendix B (g) (7) (A) (iii)	Existing and projected unemployment rates;	Sect. 5.10.3.5, pgs. 5.10-23 to 5.10-25, Table 5.10-10.	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/21/2011
Technical Area:	Socioeconomics	Project:	RMSEGF	Technical Staff:	Lisa Worrall
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Amanda Stennick

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (A) (iv)	Availability of skilled workers by craft required for construction and operation of the project;	Sect. 5.10.3.5, pgs. 5.10-25 to 5.10-33, Table 5.10-11a to 5.10-11h, Sect. 5.10.4.2, pgs. 5.10-42 to 5.10-45, Table 5.10-17 and 5.10-18. Sect. 5.10.4.3, pgs. 5.10-50 to 5.10-51, Table 5.10-20.	Yes	
Appendix B (g) (7) (A) (v)	Availability of temporary and permanent housing and current vacancy rate; and	Sect 5.10-3.4, pgs. 5.10-14 to 5.10-17, Table 5.10-5 to 5.10-7.	Yes	
Appendix B (g) (7) (A) (vi)	Capacities, existing and expected use levels, and planned expansion of utilities (gas, water and waste) and public services, including fire protection, law enforcement, emergency response, medical facilities, other assessment districts, and school districts. For projects outside metropolitan areas with a population of 500,000 or more, information for each school district shall include current enrollment and yearly expected enrollment by grade level groupings, excluding project-related changes for the duration of the project schedule.	Sect. 5.10.3.7, pg. 5.10-36, Table 5.10-13, Sect. 5.10.3.8, pgs. 5.10-36 to 5.10-39, Table 5.10-14 and Table 5.10-15, Sect. 5.10.3.9, pgs. 5.10-39 to 5.10-40, Sect. 5.10.3.10, pg. 5.10-40, Sect. 5.10.3.11, pg. 5.10-40.	Yes	
Appendix B (g) (7) (B)	A discussion of the socioeconomic impacts caused by the construction and operation of the project (note year of estimate, model, if used, and appropriate sources), including:	Sect. 5.10.4.2, pgs. 5.10-45 to 5.10-50, Table 5.10-19, Sect. 5.10.4.3, pgs. 5.10-51 to 5.10-55, Table 5.10-21.	Yes	
Appendix B (g) (7) (B) (i)	An estimate of the number of workers to be employed each month by craft during construction, and for operations, an estimate of the number of permanent operations workers during a year;	Sect. 5.10.4.2, pgs. 5.10-42 to 5.10-45, Table 5.10-17 and Table 5.10-18, Sect. 5.10.4.3, pg. 5.10-51, Table 5.10-20.	Yes	
Appendix B (g) (7) (B) (ii)	An estimate of the percentage of non-local workers who will relocate to the project area to work on the project;	Sect. 5.10.4.3, pg. 5.10-51.	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/21/2011
Technical Area:	Socioeconomics	Project:	RMSEGF	Technical Staff:	Lisa Worrall
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Amanda Stennick

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (B) (iii)	An estimate of the potential population increase caused directly and indirectly by the project;	Sect. 5.10.4.2, pgs. 5.10-45 and 5.10-46, Sect. 5.10.4.3, pg. 5.10-51.	Yes	
Appendix B (g) (7) (B) (iv)	The potential impact of population increase on housing during the construction and operations phases;	Sect. 5.10.4.2, pg. 5.10-46, Sect. 5.10.4.3, pg. 5.10-52.	Yes	
Appendix B (g) (7) (B) (v)	The potential impacts, including additional costs, on utilities (gas, water, and waste) and public services, including fire, law enforcement, emergency response, medical facilities, other assessment districts, and school districts. Include response times to hospitals and for police, and emergency services. For projects outside metropolitan areas with a population of 500,000 or more, information on schools shall include project-related enrollment changes by grade level groupings and associated facility and staffing impacts by school district during the construction and operating phases;	Sect. 5.10.4.2, pgs. 5.40-48 to 5.10-50, Sect. 5.10.4.3, pgs. 5.10-53 to 5.10-55.	Yes	
Appendix B (g) (7) (B) (vi)	An estimate of applicable school impact fees;	Sect. 4.10.4.3, pgs. 5.10-54 and 5.10-55.	Yes	
Appendix B (g) (7) (B) (vii)	An estimate of the total construction payroll and separate estimates of the total operation payroll for permanent and short-term (contract) operations employees;	Sect. 5.10.4.2, pgs. 5.10-46 and 5.10-49, Table 5.10- 19, Sect. 5.10.4.3, pgs. 5.10-52 to 5.10-55, Table 5.10-21.	Yes	
Appendix B (g) (7) (B) (viii)	An estimate of the expenditures for locally purchased materials for the construction and operation phases of the project;	Sect. 5.10.4.2, pgs. 5.10-45 to 5.10-49, Table 5.10-19, Sect. 5.10.4.3, pgs. 5.10-52 to 5.10-54, Table 5.10-21.	Yes	
Appendix B (g) (7) (B) (ix)	An estimate of the capital cost (plant and equipment) of the project;	Sect. 5.10.4.2, pgs. 5.10-48 to 5.10-49, Table 5.10-19.	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/21/2011
Technical Area:	Socioeconomics	Project:	RMSEGF	Technical Staff:	Lisa Worrall
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Amanda Stennick

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (7) (B) (x)	An estimate of sales taxes generated during construction and separately during an operational year of the project;	Sect. 5.10.4.2, pgs. 5.10-48 to 5.10-49, Table 5.10-19, Sect. 5.10.4.3, pgs. 5.10-53 to 5.10-54, Table 5.10-21.	Yes	
Appendix B (g) (7) (B) (xi)	An estimate of property taxes generated during an operational year of the project; and	Sect. 5.10.4.3, pgs. 5.10-53 to 5.10-54, Table 5.10-21.	Yes	
Appendix B (g) (7) (B) (xii)	The expected direct, indirect, and induced income and employment effects due to construction, operation, and maintenance of the project.	Sect. 5.10.4.2, pgs. 5.10-46 to 5.10-49, Table 5.10-19, Sect 5.10.4.3, pgs. 5.10-52 to 5.10-54, Table 5.10-21.	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Sect. 5.10.2, pgs. 5.10-2 to 5.10-3, Table 5.10-1, pgs. 5.10-7 to 5.10-8, Table 5.10-2.	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Sect. 5.10.8, pgs. 5.10-61 and 5.10-62, Table 5.10- 24, Sect. 5.10.9, pg. 5.10- 62.	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Sect. 5.10.8, pgs. 5.10-61 to 5.10-62, Table 5.10-24.	Yes	

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Technical Area:	Socioeconomics	Project:	RMSEGF	Technical Staff:	Lisa Worrall
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Amanda Stennick

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Sect. 5.10.9, pg. 5.10-62.	Yes	

Adequacy Issue:	Adequate X Inad	dequate DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date
Technical Area:	Soils	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Abdel-Karim Abulaban
Project Manager:	Pierre Martinez	Docket:	2011-AFC-4	Technical Senior:	Paul Marshall

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 5.11.3, pages 5.11-7 to 5.11-13 Section 5.11.4, pages 5.11-13 to 5.11-19 Section 5.11.5, pages 5.11-19 to 5.11-20 Section 5.11-6, pages 5.11-20 to 5.11-21	Yes	
Appendix B (g) (15) (A)	A map at a scale of 1:24,000 and written description of soil types and all agricultural land uses that will be affected by the proposed project. The description shall include:	Figure 5.11-1 (Note: Figure not at 1:24,000 scale due to project size); Section 5.11.3.2, pages 4.11-8 Section 5.11.3.3, pages 5.11-8 to 5.11-12 Section 5.11.3.4, page 5.11-12	Yes	
Appendix B (g) (15) (A) (i)	The depth, texture, permeability, drainage, erosion hazard rating, and land capability class of the soil;	Section 5.112, pages 5.11-8 to 5.11-12 Table 5.11-4, page 5.11-15	Yes	
Appendix B (g) (15) (A) (ii)	An identification of other physical and chemical characteristics of the soil necessary to allow an evaluation of soil erodibility, permeability, revegetation potential, and cycling of pollutants in the soil-vegetation system;	Section 5.11.3.3, pages 5.11-8 to 5.11-12 Section 5.11.4.11, page 5.11-19	Yes	
Appendix B (g) (15) (A) (iii)	The location of any proposed fill disposal or fill procurement (borrow) sites; and	Section 5.11.4.7, pages 5.11-17 to 5.11-18 4.14-5	Yes	
Appendix B (g) (15) (A) (iv)	The location of any contaminated soils that could be disturbed by project construction.	Section 5.11.4.12, page 5.11-19	Yes	

Adequacy Issue:	Adequate X Ina	idequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/26/2011
Technical Area:	Soils		Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Abdel-Karim Abulaban
Project Manager:	Pierre Martinez		Docket:	2011-AFC-4	Technical Senior:	Paul Marshall

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (15) (B)	An assessment of the effects of the proposed project on soil resources and agricultural land uses. This discussion shall include:	Section 5.11.4, pages5.11- 13 to 5.11-19	Yes	
Appendix B (g) (15) (B) (i)	The quantification of accelerated soil loss due to wind and water erosion; and	Section 5.11.4.2, pages 5.11-8 to 5.11-12 Section 5.11.4.3, pages 5.11-15 to 5.11.16	Yes	
Appendix B (g) (15) (B) (ii)	The effect of power plant emissions on surrounding soil-vegetation systems.	Section 5.11.4.11, page 5.11-19	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Table 5.11-1, pages 5.11-2 to 5.11-3 to 13	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Table 5.11-5, page 5.11-22	Yes	

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Technical Area:	Soils	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Abdel-Karim Abulaban
Project Manager:	Pierre Martinez	Docket:	2011-AFC-4	Technical Senior:	Paul Marshall

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Table 51-5, pages 5.11-22	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Table 5.11-6, page 5.11-23	Yes	

10/25/2011 Adequacy Issue: Revision No. 0 Adequate Inadequate Date Χ DATA ADEQUACY WORKSHEET Traffic and Transportation Technical Staff: Technical Area: Project: Rio Mesa Solar Electric Generating Facility Andrea Koch Project Manager: Pierre Martinez Docket: 2011-AFC-04 David Flores Technical Senior:

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and	Section 5.12.3.2, pages 5.12- 12 to 5.12-18; Section 5.12.4, pages 5.12- 18 to 5.12-31; Section 5.12.5, pages 5.12- 31 to 5.12-32;	Yes	
	any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 5.12.6, pages 5.12-32 to 5.12-33		
Appendix B (g) (5) (A)	A regional transportation setting, on topographic maps (scale of 1:250,000), identifying the project location and major transportation facilities. Include a reference to the transportation element of any applicable local or regional plan.	Figure 5.12-1; Section 5.12.2.3, page 5.12-9	Yes	
Appendix B (g) (5) (B)	If the proposed project including any linear facility is to be located within 20,000 feet of an airport runway that is at least 3,200 feet in actual length, or 5,000 feet of a heliport (or planned or proposed airport runway or an airport runway under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration), discuss the project's compliance with the applicable sections of the current Federal Aviation Regulation Part 77 – Objects Affecting Navigable Airspace, specifically any potential to obstruct or impede air navigation generated by the project at operation; such as, a thermal plume, a visible water vapor plume, glare, electrical interference, or surface structure height. The discussion should include a map at a scale of 1:24,000 that displays the airport or airstrip runway configuration, the proposed power plant site and related facilities.	Table 5.12-1, page 5.12-2; Section 5.12.2.1, page 5.12-5; Section 5.12.3.2, page 5.12-16	Yes	

Adequacy Issue: Adequate Inadequate Revision No. Date 10/25/2011 0 DATA ADEQUACY WORKSHEET Technical Area: Traffic and Transportation Project: Rio Mesa Solar Electric Generating Facility Andrea Koch Technical Staff: Project Manager: Pierre Martinez Docket: 2011-AFC-04 Technical Senior: David Flores

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (5) (C)	An identification, on topographic maps at a scale of 1:24,000, and a description of existing and planned roads, rail lines, (including light rail), bike trails, airports, bus routes serving the project vicinity, pipelines, and canals in the project area affected by or serving the proposed facility. For each road identified, include the following information, where applicable:	Figure 5.12-2; Section 5.12.3, pages 5.12- 10 to 5.12-12 and 5.12-16 to 5.12-17	Yes	
Appendix B (g) (5) (C) (i)	Road classification and design capacity;	Section 5.12.3.2, pages 5.12-10 to 5.12-15 and pages 5.12-17 to 5.12-18;	Yes	
(g) (o) (o) (i)		Tables 5.12-3 and 5.12-4, pages 5.12-14 to 5.12-15		
Appendix B (g) (5) (C) (ii)	Current daily average and peak traffic counts;	Tables 5.12-4 and 5.12-5, pages 5.12-14 to 5.12-15	Yes	
		Section 5.12.4, pages 5.12-21 to 5.12-30;	Yes	
Appendix B	Current and projected levels of service before project development, during construction, and	Tables 5.12-4 and 5.12-5, pages 5.12-14 to 5.12-15;		
(g) (5) (C) (iii)	during project operation;	Tables 5.12-7 to 5.12-14, pages 5.12-24 to 5.12-30		
Appendix B	Weight and load limitations.	Section 5.12.2, pages 5.12-2 to 5.12-10;	Yes	
(g) (5) (C) (iv)	Weight and load limitations;	Section 5.12.3, pages 5.12-17 to 5.12-18		
Appendix B (g) (5) (C) (v)	Estimated percentage of current traffic flows for passenger vehicles and trucks; and	Table 5.12-4, pages 5.12-14 to 5.12-15	Yes	
Appendix B (g) (5) (C) (vi)	An identification of any road features affecting public safety.	Section 5.12.3, page 5.12-17	Yes	

10/25/2011 Adequacy Issue: Revision No. 0 Adequate Inadequate Date Χ DATA ADEQUACY WORKSHEET Traffic and Transportation Technical Staff: Technical Area: Project: Rio Mesa Solar Electric Generating Facility Andrea Koch Project Manager: Pierre Martinez Docket: 2011-AFC-04 David Flores **Technical Senior:**

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (5) (D)	An assessment of the construction and operation impacts of the proposed project on the transportation facilities identified in subsection (g)(5)(C). Also include anticipated project-specific traffic, estimated changes to daily average and peak traffic counts, levels of service, and traffic/truck mix, and the impact of construction of any facilities identified in subsection (g)(5)(C).	Section 5.12.4, pages 5.12-21 to 5.12-30	Yes	
Appendix B (g) (5) (E)	A discussion of project-related hazardous materials to be transported to or from the project during construction and operation of the project, including the types, estimated quantities, estimated number of trips, anticipated routes, means of transportation, and any transportation hazards associated with such transport.	Section 5.12.4, pages 5.12-30 to 5.12-31	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Table 5.12-1, pages 5.12-2 to 5.12.4	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Tables 5.12-15 and 5.12-16, pages 5.12-33 to 5.12-35	Yes	

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Adequacy Issue: Adequate Inadequate Revision No. 0 Date 10/25/2011 DATA ADEQUACY WORKSHEET Traffic and Transportation Rio Mesa Solar Electric Generating Facility Andrea Koch Technical Area: Project: Technical Staff: Project Manager: Pierre Martinez Docket: 2011-AFC-04 Technical Senior: David Flores

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Table 5.12-15, pages 5.12-33 to 5.12-34	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Table 5.12-16, page 5.12-35	Yes	

Adequacy Issue: Adequate X Inadequate DATA ADEQUACY WORKSHEET Revision No. 0 Date 10/26/2011

Technical Area: Trans Line Safety & Nuisance Project: Rio Mesa Solar Facility Technical Staff: Obed Odoemelam
Project Manager: Pierre Martinez Docket: 11-AFC-4 Technical Senior: Gerry Bemis

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 1, page 1-1. Section 2.0, pp. 2-1 through 2-3, and 2-10. Section 3.0, p. 3-1.	Yes	
Appendix B (g) (18) (A)	The locations and a description of the existing switchyards and overhead and underground transmission lines that would be affected by the proposed project.	Section 2.0, p. 2-20. Section 3.0, p.3-6.	Yes	
Appendix B (g) (18) (B)	An estimate of the existing electric and magnetic fields from the facilities listed in (A) above and the future electric and magnetic fields that would be created by the proposed project, calculated at the property boundary of the site and at the edge of the rights of way for any transmission line. Also provide an estimate of the radio and television interference that could result from the project.	Section 3.0, pp. 3-6 through 3-11.	Yes	
Appendix B (g) (18) (C)	Specific measures proposed to mitigate identified impacts, including a description of measures proposed to eliminate or reduce radio and television interference, and all measures taken to reduce electric and magnetic field levels.	Section 3.0, pp. 3-8 and 3-9, and 3-11 through 3-18.	Yes	

Adequacy Issue: Adequate X Inadequate DATA ADEQUACY WORKSHEET Revision No. 0 Date 10/26/2011

Technical Area: Trans Line Safety & Nuisance Project: Rio Mesa Solar Facility Technical Staff: Obed Odoemelam
Project Manager: Pierre Martinez Docket: 11-AFC-4 Technical Senior: Gerry Bemis

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 3.0, pp. 3-18 and 3-19.	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 3.0 p.3-18 and 3-19.	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Section 3.0, p.3-18.	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 3.0, p. 3-19.	Yes	

10/27/2011 Adequacy Issue: Revision No. 0 Adequate Inadequate Date Χ DATA ADEQUACY WORKSHEET Technical Staff: Technical Area: Transmission System Design Project: Rio Mesa Solar Electric Generating Facility Laiping Ng (Rio Mesa SEGF) 11-AFC-4 Project Manager: Pierre Martinez Docket: Technical Senior: Mark Hesters

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (2) (A)	A discussion of the need for the additional electric transmission lines, substations, or other equipment, the basis for selecting principal points of junction with the existing electric transmission system, and the capacity and voltage levels of the proposed lines, along with the basis for selection of the capacity and voltage levels.	Section 1.2.1 Page 1-4 Section 3.1 Page 3-1	Yes	
Appendix B (h) (2) (B)	A discussion of the extent to which the proposed electric transmission facilities have been designed, planned, and routed to meet the transmission requirements created by additional generating facilities planned by the applicant or any other entity.	Section 2.3.13 Page 2-20 Section 3.3.3 Page 3-7 to 3-8	Yes	
Appendix B (b) (2) (C)	A detailed description of the design, construction, and operation of any electric transmission facilities, such as power lines, substations, switchyards, or other transmission equipment, which will be constructed or modified to transmit electrical power from the proposed power plant to the load centers to be served by the facility. Such description shall include the width of rights of way and the physical and electrical characteristics of electrical transmission facilities such as towers, conductors, and insulators.	Section 3.1 Page 3-1 Section 3.3 Page 3-5 to 3-8 Figure 2-7 Figure 3.3-1 Figure 3.3-2	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/27/2011	
Technical Area:	Transmission System Design	Project:	Rio Mesa Solar Electric Generating Facility (Rio Mesa SEGF)	Technical Staff:	Laiping Ng	
Project Manager:	Pierre Martinez	Docket:	11-AFC-4	Technical Senior:	Mark Hesters	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (2) (D)	A description of how the route and additional transmission facilities were selected, and the consideration given to engineering constraints, environmental impacts, resource conveyance constraints, and electric transmission constraints.	Section 3.1 Page 3-1	Yes	
Appendix B (b) (2) (E)	A completed System Impact Study or signed System Impact Study Agreement with the California Independent System Operator and proof of payment. When not connecting to the California Independent System Operator controlled grid, provide the executed System Impact Study agreement and proof of payment to the interconnecting utility. If the interconnection and operation of the proposed project will likely impact an transmission system that is not controlled by the interconnecting utility (or California Independent System Operator), provide evidence of a System Impact Study or agreement and proof of payment (when applicable) with/to the impacted transmission owner or provide evidence that there are no system impacts requiring mitigation.	Section 3.3.1 Page 3-5 to 3-6 Appendix 3A	Yes	

10/27/2011 Adequacy Issue: Revision No. 0 Adequate Inadequate Date Χ DATA ADEQUACY WORKSHEET Technical Staff: Technical Area: Transmission System Design Project: Rio Mesa Solar Electric Generating Facility Laiping Ng (Rio Mesa SEGF) 11-AFC-4 Project Manager: Pierre Martinez Docket: Technical Senior: Mark Hesters

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 3.2 Page 3-2 to 3-5	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 3.5 – 3.6 Page 3-19 to 3-20	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Section 3.5 – 3.6 Page 3-19 to 3-20	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 3.3.1 Page 3-5 to 3-6	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/20/2011
Technical Area:	Visual Resources	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Jeanine Hinde
Project Manager:	Pierre Martinez	Docket:	2011-AFC-04	Technical Senior:	Dave Flores

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 5.13.3 – Affected Environment and Regional Setting, pp. 5.13-10 & 5.13-11; Section 5.13.3.4 – Landscape Character of the Area, pp. 5.13-15 & 5.13-16; Sections 5.13.4.2, 5.13.4.3, 5.13.4.4, 5.13.5, & 5.13.6 – Assessment of Visual Effects, Individual Project Feature Impacts, Impact Significance, Cumulative Effects, & Mitigation Measures, pp. 5.13-26 to 5.13-35.	Yes	
Appendix B (g) (6) (A)	Descriptions of the existing visual setting of the vicinity of the proposed project site and the proposed routes for any project-related linear facilities. Include:	Section 5.13.3 – Affected Environment, pp. 5.13-10 & 5.13-11; Section 5.13.3.3 includes a paragraph with a brief overview of existing site conditions, p. 5.13-13; the proposed generator tie-line is briefly described on pp. 5.13-1 & 5.13-15; Figures 5.13-1a to 5.13-3 show the visual sphere of influence for the project, including the transmission line route/corridor.	Yes	
Appendix B (g) (6) (A) (i)	Topographic maps at a scale of 1:24,000 that depict directions from which the project would be seen, the view areas most sensitive to the potential visual impacts of the project, and the locations where photographs were taken for (g)(6)(C); and	Figures 5.13-1a, 5.13-1b, 5.13-2a, & 5.13-2b.	Yes	
Appendix B (g) (6) (A) (ii)	Description of the existing visual properties of the topography, vegetation, and any modifications to the landscape as a result of human activities, including existing water vapor plumes, above-ground electrical transmission lines, and nighttime lighting levels in the project viewshed.	Sections 5.13.3.5 & 5.13.3.6 include descriptions of the visual sphere of influence for the project, pp. 5.13-16 & 5.13-19; the nighttime lighting level is very briefly described at the top of p. 5.13-15.	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/20/2011
Technical Area:	Visual Resources	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Jeanine Hinde
Project Manager:	Pierre Martinez	Docket:	2011-AFC-04	Technical Senior:	Dave Flores

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (B)	An assessment of the visual quality of those areas that would be affected by the proposed project. For projects proposed to be located within the coastal zone, the assessment should also describe how the proposed project would be sited to protect views to and along the ocean and scenic coastal areas, would minimize the alteration of natural land forms, would be visually compatible with the character of surrounding areas.	Section 5.13.3.6 describes scenic quality, pp. 5.13-17 to 5.13-19; Section 5.13.3.9 – Key Observation Points (KOPs), pp. 5.13-21 to 5.13-25 include discussions of scenic attractiveness/quality for the KOPs.	Yes	
Appendix B (g) (6) (C)	In consultation with Energy Commission staff, identify: i) any designated scenic roadways or scenic corridors and any visually sensitive areas that would be affected by the proposed project, including recreational and residential areas; and ii) the locations of the key observation points to represent the most critical viewing locations from which to conduct detailed analyses of the visual impacts of the proposed project. Indicate the approximate number of people using each of these sensitive areas and the estimated number of residences with views of the project. Also identify any major public roadways and trails of local importance that would be visually impacted by the project and indicate the types of travelers (e.g., local residents, recreationists, workers, commuters, etc.) and the approximate number of vehicles, bicyclists, and/or hikers per day.	Bradshaw Trail, a federally-designated "Backcountry Byway," is discussed at the bottom of p. 5.13-5. The portion of Interstate-10 that is eligible for designation as a state scenic highway is discussed on p. 5.13-7. Figure 5.13-6 (Landscape Character Photograph 3) was included to show a view from the Bradshaw Trail. Section 5.13.3.4 – Landscape Character of the Area, pp. 5.13-15 & 5.13.16 discuss landscape character photographs, including photographs taken from sensitive viewing areas. Section 5.13.3.9 – Key Observation Points, pp. 5.13-21 to 5.13-25, characterizes viewers and critical viewing locations for the six KOPs.	Yes	

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Technical Area:	Visual Resources	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Jeanine Hinde
Project Manager:	Pierre Martinez	Docket:	2011-AFC-04	Technical Senior:	Dave Flores

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (D)	A table providing the dimensions (height, length, and width, or diameter) and, proposed color(s), materials, finishes, patterns, and other proposed design characteristics of each major component visible from off the project site, including any project-related electrical transmission line and/or offsite aboveground pipelines and metering stations.	Table 5.13-4 on pp. 5.13-11 to 5.13-13. The transmission line is briefly mentioned on p. 5.13-15. It is mentioned on pp. 5.13-14, 5.13-30, 5.3-31 that project structures will be painted in muted tones.	Yes	
Appendix B (g) (6) (E)	Provide the cooling tower and heat recovery steam generator (HRSG) exhaust design parameters that affect visible plume formation. For the cooling tower, data shall include heat rejection rate, exhaust temperature, exhaust mass flow rate, liquid to gas mass flow ratio, and, if the tower is plume-abated, moisture content (percent by weight) or plume-abated fogging curve(s). The parameters shall account for a range of ambient conditions (temperature and relative humidity) and proposed operating scenarios, such as duct firing and shutting down individual cells. For the heat recovery steam generator exhausts, data shall include moisture content (percent by weight), exhaust mass flow rate, and exhaust temperature. The parameters must correspond to full-load operating conditions at specified ambient conditions, and shall account for proposed operating scenarios, such as power augmentation (i.e., evaporative coolers, inlet foggers, or steam injection) and duct firing, or proposed HRSG visible plume abatement, such as the use of an economizer bypass. For simple-cycle projects, provide analogous data for the exhaust stack(s).	Section 5.13.4.3, p. 5.13-31, includes a discussion of cooling and water vapor plumes and describes how visible plumes will not be an issue for the project.	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/20/2011
Technical Area:	Visual Resources	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Jeanine Hinde
Project Manager:	Pierre Martinez	Docket:	2011-AFC-04	Technical Senior:	Dave Flores

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (6) (F)	Provide: i) full-page color photographic reproductions of the existing site, and ii)full-page color simulations of the proposed project at life-size scale when the picture is held 10 inches from the viewer's eyes, including any project-related electrical transmission lines, in the existing setting from each key observation point. If any landscaping is proposed to comply with zoning requirements or to mitigate visual impacts, include the landscaping in simulation(s) representing sensitive area views, depicting the landscaping five years after installation; and estimate the expected time until maturity is reached.	Photographs showing existing conditions and visual simulations from the key observation points are shown on Figures 5.13-14a through 5.13-19b.	Yes	
Appendix B (g) (6) (G)	An assessment of the visual impacts of the project, including light, glare, and any modeling of visible plumes. Include a description of the method and identify any computer model used to assess the impacts. Provide an estimate of the expected frequency and dimensions (height, length, and width) of the visible cooling tower and/or exhaust stack plumes. Provide the supporting assumptions, meteorological data, operating parameters, and calculations used.	Section 5.13.4.2, Assessment of Visual Effects, and Section 5.13.4.3, Individual Project Feature Impacts, discuss the potential effects of the project on visual resources (pp. 5.13-26 to 5.13-32). No equipment is being proposed that could cause visible water vapor plumes.	Yes	
Appendix B (g) (6) (H)	If any landscaping is proposed to reduce the visual impacts of the project, provide a conceptual landscaping plan at a 1:40 scale (1"=40"). Include information on the type of plant species proposed, their size, quantity, and spacing at planting, expected heights at 5 years and maturity, and expected growth rates.	Section 5.13.4.3 – Individual Project Feature Impacts, on p. 5.13-31 there is a mention of "landscape areas" in the proposed common area; on page 5.13-32 it is stated that a landscaping plan will not be prepared for the project.	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/20/2011
Technical Area:	Visual Resources	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Jeanine Hinde
Project Manager:	Pierre Martinez	Docket:	2011-AFC-04	Technical Senior:	Dave Flores

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Tables 5.13-1, 5.13-2, and 5.13-3 address LORS conformity (pp. 5.13-2, 5.13-3, 5.13-5, and 5.13-8 to 5.13-10).	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 5.13.7 – Involved Agencies and Agency Contacts, Table 5.13-5, p. 5.13-36.	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Table 5.13-5 – Agency Contacts	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	As stated on p. 5.13-36, no permits are required pertaining to visual resources.	Yes	

Adequacy Issue:	Adequate X Inadequate	DATA	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/24/2011
Technical Area:	Waste Management	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Ellie Townsend-Hough
Project Manager:	Pierre Martinez	Docket:	2011-AFC-04	Technical Senior:	Paul Marshall

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (1) (C)	A detailed description of the design, construction and operation of the facilities, specifically including the power generation, cooling, water supply and treatment, waste handling and control, pollution control, fuel handling, and safety, emergency and auxiliary systems, and fuel types and fuel use scenarios; and	Page 5.14-1 Section 5.14.1 Page 5.14-13 Section 5.14.4	Yes	
Appendix B (e) (1)	A discussion of how facility closure will be accomplished in the event of premature or unexpected cessation of operations.	Page 5.14-19 Section 5.14.4.3	Yes	
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Appendix 5.11C Page 5.14-8 Section 5.14.3 Page 5.14-20 Section 5.14.5 Page 5.14-20 Section 5.14.6	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/24/2011
Technical Area:	Waste Management	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Ellie Townsend-Hough
Project Manager:	Pierre Martinez	Docket:	2011-AFC-04	Technical Senior:	Paul Marshall

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (12) (A)	A Phase I Environmental Site Assessment (ESA) for the proposed power plant site using methods prescribed by the American Society for Testing and Materials (ASTM) document entitled "Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process" (Designation: E 1527-93, May 1993), which is incorporated by reference in its entirety; or an equivalent method agreed upon by the applicant and the CEC Staff that provides similar documentation of the potential level and extent of site contamination. The Phase I ESA shall have been completed no earlier than one year prior to the filing of the AFC.	Appendix 5.11C	Yes	
Appendix B (g) (12) (B)	A description of each waste stream estimated to be generated during project construction and operation, including origin, hazardous or nonhazardous classification pursuant to Title 22, California Code of Regulations, § 66261.20 et seq., chemical composition, estimated annual weight or volume generated, and estimated frequency of generation.	Page 5.14-14 Table 5.14-3 Page 5.15-16 Table 5.14-4	Yes	
Appendix B (g) (12) (C)	A description of all waste disposal sites which may feasibly be used for disposal of project wastes. For each site, include the name, location, classification under Title 23, California Code of Regulations, § 2530 et seq., the daily or annual permitted capacity, daily or annual amounts of waste currently being accepted, the estimated closure date and remaining capacity, and a description of any enforcement action taken by local or state agencies due to waste disposal activities at the site.	Page 5.14-11 Table 5.14-2	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/24/2011
Technical Area:	Waste Management	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Ellie Townsend-Hough
Project Manager:	Pierre Martinez	Docket:	2011-AFC-04	Technical Senior:	Paul Marshall

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (12) (D)	A description of management methods for each waste stream, including methods used to minimize waste generation, length of on- and off-site waste storage, re-use and recycling opportunities, waste treatment methods used, and use of contractors for treatment.	Page5.14-14 Table 5.14-3 Page 5.14-16 Table 5.14-4	Yes	
Appendix B (h) (1) (B)	A discussion of any measures proposed to improve adverse site conditions.	Appendix 5.11C Page 5.14-20 Section 5.14.6	Yes	
Appendix B (h) (1) (D) (v)	The waste disposal system and on-site disposal sites;	Page 5.14-13 Section 5.14.4	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Page 5.14-2 Table 5.14-1	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Page 5.14-22 Table 5.14-5 Page 5.14-23 Table 5.14-6	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 10/24/2011
Technical Area:	Waste Management	Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff:	Ellie Townsend-Hough
Project Manager:	Pierre Martinez	Docket:	2011-AFC-04	Technical Senior:	Paul Marshall

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Page 5.14-22 Section 5.14.7 Table 5.14-5	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Page 5.14-22 Section 5.14.8 Table 5.14-6	Yes	

Adequacy Issue:	Adequate Inadequate	X DAI	A ADEQUACY WORKSHEET	Revision No. 0	Date 11/7/2011	
Technical Area:	Water Resources	Project:	Rio Mesa SEGF	Technical Staff:	A. Abulaban &	
					C. Dennis	
Project Manager:	Pierre Martinez	Docket:	2011-AFC-4	Technical Senior:	Paul Marshall	

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SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 5.15.3, page 5.15- 10 Section 5.15.5, page 5.15- 36 Section 5.15.6, page 5.15- 37	No	Submit a discussion of the effectiveness of the proposed mitigation and monitoring plans proposed to verify the mitigation effectiveness.
Appendix B (g) (14) (A)	All the information required to apply for the following permits, if applicable, including:	_		
Appendix B (g) (14) (A) (i)	Waste Discharge Requirements; National Pollutant Discharge Elimination System Permit; and/or a Section 401 Certification or Waiver from the appropriate Regional Water Quality Control Board (RWQCB);	Section 5.15.2.1, page 5.15-4	No	In support of the development of Waste Discharge Requirements for discharge of industrial wastewater to the proposed evaporation ponds, provide a complete characterization of the discharge including but not limited to: Design and actual flows; A list of constituents and the discharge concentration of each constituent; A list of other appropriate waste discharge characteristics; A description and schematic drawing of all treatment processes; A description of any Best Management Practices used; and A description of disposal methods. To facilitate a more timely review and agency coordination, this information may be presented using the Regional Water Quality Control Board Application/Report of Waste Discharge General Information Form for Waste Discharge Requirements or NPDES Permit (Form 200).

Adequacy Issue:	Adequate Inadequate	X DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 11/7/2011	
Technical Area:	Water Resources	Project:	Rio Mesa SEGF	Technical Staff:	A. Abulaban &	
					C. Dennis	
Project Manager:	Pierre Martinez	Docket:	2011-AFC-4	Technical Senior:	Paul Marshall	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (A) (ii)	Construction and Industrial Waste Discharge and/or Industrial Pretreatment permits from wastewater treatment agencies;	Not applicable	NA	
Appendix B (g) (14) (A) (iii)	Nationwide Permits and/or Section 404 Permits from the U.S. Army Corps of Engineers; and	Section 5.2.6, page 5.2-60	Yes	
Appendix B (g) (14) (A) (iv)	Underground Injection Control Permit(s) from the U.S. Environmental Protection Agency, California Division of Oil and Gas, and RWQCB.	Not applicable	N/A	
Appendix B (g) (14) (B)	A detailed description of the hydrologic setting of the project. The information shall include a narrative discussion and on maps at a scale of 1:24,000 (or appropriate scale approved by staff), describing the chemical and physical characteristics of the following nearby water bodies that may be affected by the proposed project:	Section 5.15.3.1, page 5.15-11 Figure 5.15-1 Figure 5.15-3 Figure 5.15-4 Figure 5.14-6	Yes	
Appendix B (g) (14) (B) (i)	Ground water bodies and related geologic structures;	Section 5.15.3.1, page 5.15-11	Yes	
Appendix B (g) (14) (B) (ii)	Surface water bodies;	Section 5.15.3.1, page 5.15-11	Yes	
Appendix B (g) (14) (B) (iii)	Water inundation zones, such as the 100-year flood plain and tsunami run-up zones;	Section 5.15.3.1, page 5.15-11	Yes	
Appendix B (g) (14) (B) (iv)	Flood control facilities (existing and proposed); and	Section 5.11.4.8, page 5.11-18 Section 5.15.3.2, page 5.15-21	Yes	
Appendix B (g) (14) (B) (v)	Groundwater wells within ½ mile if the project will include pumping.	Table 5.15-3 Figure 5.15-4	Yes	

Adequacy Issue:	Adequate Inadequate	X DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 11/7/2011	
Technical Area:	Water Resources	Project:	Rio Mesa SEGF	Technical Staff:	A. Abulaban &	
					C. Dennis	
Project Manager:	Pierre Martinez	Docket:	2011-AFC-4	Technical Senior:	Paul Marshall	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (C)	A description of the water to be used and discharged by the project. This information shall include:	Section 5.15.3.3, page 5.15-27	Yes	
Appendix B (g) (14) (C) (i)	Source(s) of the primary and back-up water supplies and the rationale for their selection;	Section 5.15.3.3, page 5.15-27	Yes	
Appendix B (g) (14) (C) (ii)	The expected physical and chemical characteristics of the source and discharge water(s) including identification of both organic and inorganic constituents before and after any project-related treatment. For source waters with seasonal variation, provide seasonal ranges of the expected physical and chemical characteristics. Provide copies of background material used to create this description (e.g., laboratory analysis);	Section 5.15.3.1, page 5.15-11 Section 5.15.3.3, page 5.15-27	No	Provide information about the expected physical and chemical characteristics of the wastewater to be discharged to the proposed evaporation pond consistent with the information required under Appendix B(g)(14)(A)(i) above.
Appendix B (g) (14) (C) (iii)	Average and maximum daily and annual water demand and waste water discharge for both the construction and operation phases of the project;	Section 5.15.3.3, page 5.15-27	Yes	
Appendix B (g) (14) (C) (iv)	A detailed description of all facilities to be used in water conveyance (from primary source to the power plant site), water treatment, and wastewater discharge. Include a water mass balance diagram;	Section 5.15.3.3, page 5.15-27 Figure 5.15-9 Figure 5.15-10	Yes	

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Technical Area:	Water Resources	Project:	Rio Mesa SEGF	Technical Staff:	A. Abulaban &	
					C. Dennis	
Project Manager:	Pierre Martinez	Docket:	2011-AFC-4	Technical Senior:	Paul Marshall	

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (C) (v)	For all water supplies intended for industrial uses to be provided from public or private water purveyors, a letter of intent or will-serve letter indicating that the purveyor is willing to serve the project, has adequate supplies available for the life of the project, and any conditions or restrictions under which water will be provided. In the event that a will-serve letter or letter of intent can not be provided, identify the most likely water purveyor and discuss the necessary assurances from the water purveyor to serve the project;	Not applicable	N/A	
Appendix B (g) (14) (C) (vi)	For all water supplied which necessitates transfers and/or exchanges at any point, identify all parties and contracts/agreements involved, the primary source for the transfer and/or exchange water (e.g., surface water, groundwater), and provide the status of all appropriate agencies' approvals for the proposed use, environmental impact analysis on the specific transfers and/or exchanges required to obtain the proposed supplies, a copy of any agency regulations that govern the use of the water, and an explanation of how the project complies with the agency regulation(s);	Appendix 5.15B	Yes	
Appendix B (g) (14) (C) (vii)	Provide water mass balance and heat balance diagrams for both average and maximum flows that include all process and/or ancillary water supplies and wastewater streams. Highlight any water conservation measures on the diagram and the amount that they reduce water demand; and	Figure 2-4-1 Figure 2-4-2 Figure 2-4-3 Figure 2-4-4	Yes	

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SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (C) (viii)	For all projects which have a discharge, provide a copy of the will-serve letter, permit or contract with the public or private entity that will be accepting the wastewater and contact storm water from the project. The letter, permit or contract, if possible, shall identify the discharge volumes and the chemical or physical characteristics under which the wastewater and contact storm water will be accepted.	N/A	N/A	
	In the event that a will-serve letter, permit, or contract cannot be provided, identify the most likely wastewater/storm water entity and discuss why the applicant was unable to secure the necessary assurances to serve the project's wastewater/storm water needs. Also, discuss the term of the wastewater service to the project, whether the wastewater entity has adequate permit capacity for the volume of wastewater from the project and has adequate permit levels for the chemical/physical characteristics of the project's wastewater and storm water for the life of the project, and any issues or conditions/restrictions the wastewater entity may impose on the project.			
Appendix B (g) (14) (D)	Identify all project elements associated with stormwater drainage, including a description of the following:	Section 5.15.3.1, page 5.15-11 Section 5.15.3.2, page 5.15-21	Yes	
Appendix B (g) (14) (D) (i)	Monthly and/or seasonal precipitation and stormwater runoff and drainage patterns for the proposed site and surrounding area that may be affected by the project's construction and operation;	Section 5.15.3.1, page 5.15-11 Section 5.15.3.2, page 5.15-21	Yes	

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					C. Dennis
Project Manager:	Pierre Martinez	Docket:	2011-AFC-4	Technical Senior:	Paul Marshall

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (D) (ii)	Drainage facilities and the design criteria used for the plant site and ancillary facilities, including but not limited to capacity of designed system, design storm, and estimated runoff;	Section 5.15.3.2, page 5.15-21 Appendix 5.11B	Yes	
Appendix B (g) (14) (D) (iii)	All assumptions and calculations used to calculate runoff and to estimate changes in flow rates between pre- and post construction; and	Section 5.15.3.2, page 5.15-21 Appendix 5.11B	Yes	
Appendix B (g) (14) (D) (iv)	A copy of applicable regional and local requirements regulating the drainage systems, and a discussion of how the project's drainage design complies with these requirements.	Section 5.15.2, page 5.15-2	No	Provide a discussion of how elements of the project design comply with each of the applicable LORS identified in Table 5.15-1 of the AFC.
Appendix B (g) (14) (E)	An impacts analysis of the proposed project on water resources and a discussion of conformance with water-related LORS and policy. This discussion shall include:	Section 5.15.4, page 5.15- 29 Appendix 5.15B Appendix 5.15G	Yes	
Appendix B (g) (14) (E) (i)	The effects of project demand on the water supply and other users of this source, including, but not limited to, water availability for other uses during construction or after the power plant begins operation, consistency of the water use with applicable RWQCB basin plans or other applicable resource management plans, and any changes in the physical or chemical conditions of existing water supplies as a result of water use by the power plant;	Section 5.15.3.3, page 5.15-27 Section 5.15.5, page 5.15- 36 Appendix 5.15B Appendix 5.15G	Yes	

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			_			C. Dennis	
Project Manager:	Pierre Martinez		Docket:	2011-AFC-4	Technical Senior:	Paul Marshall	

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (E) (ii)	If the project will pump groundwater, an estimation of aquifer drawdown based on a computer modeling study shall be conducted by a professional geologist and include the estimated drawdown on neighboring wells within 0.5 mile of the proposed well(s), any effects on the migration of groundwater contaminants, and the likelihood of any changes in existing physical or chemical conditions of groundwater resources shall be provided;	Section 5.15.4.1, page 5.15-30 Section 5.15.4.2, page 5.15-31 Appendix 5.15G	Yes	
Appendix B (g) (14) (iii)	The effects of construction activities and plant operation on water quality and to what extent these effects could be mitigated by best management practices;	Section 5.15.3.2, page 5.15-21 Section 5.15.4.1, page 5.15-30 Section 5.15.4.2, page 5.15-31	Yes	
Appendix B (g) (14) (iv)	If not using a zero liquid discharge project design for cooling and process waters, include the effects of the proposed wastewater disposal method on receiving waters, the feasibility of using pre-treatment techniques to reduce impacts, and beneficial uses of the receiving waters. Include an explanation why the zero liquid discharge process is "environmentally undesirable," or "economically unsound;"	Section 5.15.3.3, page 5.15-27	Yes	

Adequacy Issue:	Adequate Inadequate	X DAT	A ADEQUACY WORKSHEET	Revision No. 0	Date 11/7/2011	
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					C. Dennis	
Project Manager:	Pierre Martinez	Docket:	2011-AFC-4	Technical Senior:	Paul Marshall	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (14) (v)	If using fresh water, include a discussion of the cumulative impacts, alternative water supply sources and alternative cooling technologies considered as part of the project design. Include an explanation of why alternative water supplies and alternative cooling are "environmentally undesirable," or "economically unsound;"	Section 5.15.4.3, page 5.15-35 Section 5.15.5, page 5.15-36	Yes	
Appendix B (g) (14) (vi)	The effects of the project on the 100-year flood plain, flooding potential of adjacent lands or water bodies, or other water inundation zones; and	Section 5.15.3.2, page 5.15-21 Appendix 5.11B	Yes	
Appendix B (g) (14) (vii)	All assumptions, evidence, references, and calculations used in the analysis to assess these effects.	Section 5.15.3.2, page 5.15-21 Appendix 5.11B	Yes	
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.15.2, page 5.15-2	Yes	

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					C. Dennis	
Project Manager:	Pierre Martinez	Docket:	2011-AFC-4	Technical Senior:	Paul Marshall	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	Information Required To Make Afc Conform With Regulations
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 5.15.7, page 5.15-37	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Section 5.15.7, page 5.15- 37	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.15.8, page 5.15-39	Yes	

Adequacy Issue:	Adequate X	Inadequate		DATA ADEQUACY WORKSHEET	Revision No.	0	Date	10/27/2011
Technical Area:	Worker Safety		Project:	Rio Mesa Solar Electric Generating Facility	Technical Sta	aff:	Rick 1	yler
Project Manager:	Pierre Martinez		Docket:	10-AFC-4	Technical Ser	nior:	Rick T	yler

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 5.16	Yes	
Appendix B (g) (11) (A)	A description of the safety training programs which will be required for construction and operation personnel.	Sections 5.16.4.1	Yes	
Appendix B (g) (11) (B)	A complete description of the fuel handling system and the fire suppression system.	Section 5.16.4.1	Yes	
Appendix B (g) (11) (C)	Provide draft outlines of the Construction Health and Safety Program and the Operation Health and Safety Program, as follows:			
	Construction Health and Safety Program: * Injury and Illness Prevention Plan (8 Cal. Code Regs., § 1509);	Section 5.16.4.1	Yes	
	* Fire Protection and Prevention Plan (8 Cal. Code Regs., § 1920);	Section 5.16.4.1	Yes	
	* Personal Protective Equipment Program (8 Cal. Code Regs., §§ 1514-1522)	Section 5.16.4.1	Yes	
	Operation Health and Safety Program: * Injury and Illness Prevention Program (8 Cal. Code Regs., § 3203);	Section 5.16.4.1	Yes	
	* Fire Prevention Plan (8 Cal. Code Regs., § 3221);	Section 5.16.4.1	Yes	
	* Emergency Action Plan (8 Cal. Code Regs., § 3220);	Section 5.16.4.1	Yes	
	Personal Protective Equipment Program (8 Cal. Code Regs., §§ 3401-3411).	Section 5.16.4.1	Yes	

Adequacy Issue:	Adequate X	Inadequate		DATA ADEQUACY WORKSHEET	Revision No(<u>0</u> Da	te <u>10/27/2011</u>	
Technical Area:	Worker Safety		Project:	Rio Mesa Solar Electric Generating Facility	Technical Staff	f: R	ck Tyler	
Project Manager:	Pierre Martinez		Docket:	10-AFC-4	Technical Seni	ior: Ri	ck Tyler	

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.16.2 Table 5.16-1	Yes	
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 5.16.8 Table 5.16-7	Yes	
Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	Section 5.16.7 Table 5.16-6	Yes	
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 5.16.8 Table 5.16-7	Yes	